MEANING AND PRACTICE OF COMMERCIAL EDUCATION

HERRICK

MACMILLAN'S COMMERCIAL SERIES

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THE MEANING AND PRACTICE OF COMMERCIAL EDUCATION

MACMILLAN'S COMMERCIAL SERIES.

EDITED BY

CHEESMAN A. HERRICK, PH.D.

DIRECTOR SCHOOL OF COMMERCE, PHILADELPHIA CENTRAL HIGH SCHOOL

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PHILADELPHIA

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PREFACE

In 1892 the author entered as a student in what was then the only institution in the United States giving higher commercial education, — the Wharton School of the University of Pennsylvania. After six years in the undergraduate and graduate departments of that school, he was called to the direction of an advanced secondary department for commercial education. In the light of his later work, the writer feels that he was fortunate in having taken an earlier course at the Illinois State Normal University, subsequent to which he had experience in school administration. He has written as one interested in education, and trusts that he furnishes from a particular point of view, a survey of contemporary educational discussion; he has aimed to give due regard to economics and social science; and, lastly, he has kept in mind throughout the more concrete and practical aspects of commercial operations.

The book which is here offered is the result of a dozen years of investigating and writing. Four years ago the writer published a monograph on commercial education through the National Herbart Society at the University of Chicago Press. Since that time he has published other papers in the Proceedings of the National Educa-

tional Association, Proceedings of the Michigan Political Science Association, and elsewhere. The interest which the earlier papers aroused and an apparent general desire for information on commercial education have led to the preparation of the present work, covering the whole field and bringing the subject up to date.

This book is published in the hope that it may prove of value to educators and to business men. If it shall in any measure serve as a ground of common interest for these two classes, the author's purpose will be realized. Schoolmen are too largely in the world, but not of the world. Similarly, business men as a class are too narrowly and selfishly pursuing their calling. The writer holds that there will be a gain in every way by modernizing our education and rendering it more practical. With an education better suited to the needs of the times there will be an increasing attendance upon schools, — elementary, secondary, and higher.

The author's plea is much more largely for rational changes in existing schools than for the founding of new schools. The best authorities in this country and Europe are coming to the position that our general education is weakened by too strong insistence upon the classics. This means that a large element, that otherwise might do so, will not avail itself of secondary and higher education. What Professor Rein of Jena has well said of Germany is equally true of the United States: "One section of our people must carefully preserve the great historical continuity of our culture. But only one part

of the strength of the nation is required for this task. Another section may be 'steeped' in modern ideas, and in this way gain strength and skill for the duties of modern life. In this way the old rivalry between Humanism and Realism will become a friendly rivalry, since both enjoy the same freedom, the same light, and the same air."

In dealing with the problems which the book presents we must begin where we are. Gradual and rational changes in our higher and secondary education and in the education supplementary to elementary education, — this is not revolutionary, — and this is the suggestion of the book. It has sometimes been charged against the author that he aims to "commercialize" the whole school program. If this is understood as set forth in the following pages, he accepts the charge.

Commercialism has been much bandied about, and not a little misunderstood. Commercial methods are obvious in the work of some who decry commercialism; on the other hand, many business men are altruistic in the best sense. The kind of education urged in this book, it is believed, will teach men the meaning of business and raise commerce above narrow commercialism. Commerce we must have.

Two main sources of the book are the announcements and reports of schools and expressions from business men and students of education. While these have been used freely, the author has tried to avoid lengthy quotations. The curricula are mainly in an appendix, where

each stands in relation to the others. Cross references will enable those who wish to examine the curricula in connection with the accounts of the schools to do so. Questions are similarly supplied in an appendix for the departments of work in which examinations constitute an important feature. The appendix containing a bibliography will likely be regarded as not the least valuable section of the book. The list is by no means exhaustive, nor does it include many works which have been consulted, but it furnishes a selection of what seem the most important titles.

A book like the present cannot fail to be misunderstood, and it will probably call forth adverse criticism, but if it shall raise issues and lead to further discussion of the questions with which it deals, its publication will have been worth while. Thirty years ago Thomas H. Huxley, in his inaugural address as Lord Rector of the University of Aberdeen, said that he would likely go down to posterity as "the Rector who was always beaten." The present writer expresses himself in Huxley's sentiment, "if my defeats are the victories of my successors, I shall be well content."

It is a pleasure to acknowledge courtesies from many persons whose names are mentioned in the notes, also from numerous heads of schools both in this country and in Europe. To Professors Parke Schoch of Drexel Institute and Charles DeGarmo of Cornell, and Mr. L. L. Williams of Rochester, N.Y., the author is indebted for reading parts of the manuscript and proof. Dr. Francis

Burke Brandt of the Central High School also read several chapters of the book in manuscript, and Mr. William H. Mearns of the same institution read all the proof. To these gentlemen the author is indebted for many valuable suggestions. The library authorities of Columbia University were good enough to make available numerous books of their collection. The author is also much indebted to Mr. Samuel Culviner, Jr., for his help both in preparing the manuscript and in putting the book through the press.

C. A. H.

PHILADELPHIA,
June, 1904.

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THE MEANING AND PRACTICE OF COMMERCIAL EDUCATION

CHAPTER I

Definition and Place of Commercial Education

Progressive Education in Progressive Society. — No best scheme of education can be devised either for all the people at any one time, or for a part of the people for all time. To serve its best purpose, instruction should be suited to the needs of life, and as the latter are continually changing, both the materials and the methods of instruction must be modified. Educational reform is ever present. One of the leaders of educational thought in the United States recommends that once in ten years we attempt a formulation anew of our educational doctrine, keeping in mind the changing social needs, the new literature of education, and the practical experiments that have been conducted.[1] At least each generation may repeat

[1] Professor Hanus, National Educational Association, Superintendents' Meeting, 1902. *Proceedings*, p. 166.

The eleventh principle in the report of the committee on resolutions of the National Educational Association for 1902 was as follows: —

"Recognizing the necessity of making many changes from year to year in our educational system in order to meet the demands of our social and indus-

the justification for Milton's immortal Tractate, ". . . to write now the reforming of education . . . one of the greatest and noblest designs that can be thought on, and for the want whereof this nation perishes. . . ."

It is in the light of changing social needs, and only after an examination of the newer literature of the subject, and also with some knowledge of recent experiments, that an attempt is here made to review and set forth some of the principles of education as they affect and are in turn affected by commercial life.

One who wishes to be taken seriously hesitates to speak with too great confidence concerning the educational character of a past epoch, or the tendency of the present. Education is a many-sided social phenomenon, and a statement concerning any element in it is not without grave difficulties. While education is not an exact science, and while a treatise on it cannot carry the conviction of a logical demonstration, it is hoped that in the following pages "short-sightedness and arrogance" may be avoided. First of all, it may be well to disclaim any intention of

trial conditions, and to keep pace with the improvements in both methods and administration, we believe that the committees known as 'The Committee on Secondary Education,' 'The Committee on Elementary Education,' and 'The Committee on Rural Schools,' should be re-created as standing committees, to perform such duties as were prescribed for them under the resolutions creating them. These committees should make report to the Association from time to time as the growth in education and the changes due to conditions may demand."

This was unanimously adopted. — *Proceedings*, p. 28.

Professor Hanus is (1904) serving as chairman of a Committee on Contemporary Educational Doctrine. — *Yearbook*, N.E.A., 1903–1904, pp. 47–48.

attacking or discrediting existing plans of instruction. One motive actuates all that is here said, — to retain existing schools and plans of study and make them better; to add yet other schools, and if possible make them better suited to the needs of the time than are those we now have.[1]

This work makes an attempt to show the theoretical soundness and practical necessity for a new element, termed "commercial," in our education. Supplementary to this it will pass in review what is already being done abroad and at home to realize the ends of commercial education. Finally, an effort will be made to show how better to realize the ideals set forth.

Educational progress for thirty years has been mainly along the lines opened up by scientific achievement. There has been, in this period, gain from scientific schools directly, as well as from the indirect influence that these institutions have exerted on other branches of education. No doubt the impulse for technical education came in part from the national land grants of 1862, but technical and industrial institutions have multiplied, chiefly, because there was a demand for the instruction they gave. In the present era new machinery for production, with

[1] "The cry for commercial education is essentially a cry for a general as distinct from a special education: on that ground, if for no other, I welcome the cry, and believe that it will tend to raise the general level of intelligence. There is no antagonism in it to the pursuit of classical studies, where time and circumstances permit, and it would be much to be regretted if the classical schools were to lose all control over this species of education." — POLLARD, *Commercial Education*, pp. 128–129.

more intense competition, has made it imperative that new methods of manufacture and organization be adopted, and education, among other things, has given itself to the application of science to industrial processes. We have here the interesting phenomenon of science influencing education and education in turn affecting industrial progress. Technological and allied schools have, however, confined themselves largely to problems of production. Their achievements have been the marvel of the world. Europe's dread of the "American peril" is because of the efficiency of our people in production, and this in turn may be traced to superior scientific and technical education. Several books on this subject have recently appeared in Europe, all pointing the same lesson in the same warning fashion. Most significant of all was the action of Mr. Alfred Mosely in bringing to this country (1902) the representatives of twenty-three trades-unions to let them come in contact with American workmen producing under American conditions. It was the writer's good fortune to have an hour with a practical, hard-headed trades-union secretary from Sheffield; more modern and more practical secondary and higher technical education, it was felt, gave to the United States a distinct and far-reaching advantage. This workman contrasted the foremen and superintendents in American factories, many of them graduates in engineering and technology from such institutions as Cornell and the Massachusetts Institute, with men in similar positions in England, and found the contrast altogether favorable to the Americans. (See p. 173.)

Two exactly opposite conclusions are deduced from the facts above stated. One is, that all that education needs to do is to fit men for production and that competition will give commercial advantages. A prominent business man of New York declared recently that if he could make our goods cheap enough and good enough, they would sell themselves; in other words, that the supreme need is on the side of preparing men for production. A very different conclusion was reached by Charles R. Flint before a Manufacturers' Association in Chicago, in 1900. "The great problems of the economics of production have been solved — from this time forward all economic thought will be concentrated chiefly on the economics of distribution."

Acceptance of either of the preceding as an ideal would be unfortunate. That we need high skill in production goes without saying; but we need also an outlet for the things produced, and the machinery of distribution. "A market is a necessary adjunct to a factory." Says Sir Philip Magnus, "The questions of technical and commercial education are so closely associated that it is difficult to consider them except in connection with each other."[1] The same writer would, in general, limit technical education to production and commercial education to distribution; but might it not be less confusing to consider commercial as one branch of technical education?

As production needs distribution and exchange to complete its work, so all the special training demanded by

[1] *Industrial Education*, p. 47.

the present is not given in industrial schools. Life in the present is scientific, it is economic; but more narrowly, and for a larger element in the community, it is commercial. Business now is complex, intricate, scientific, and those who are to engage in it need a different equipment than has hitherto been thought sufficient for the business man. "Commerce, the distributer of the product, — the supply agent of the consumer and the producer, — plays an important part in competitive warfare. The requirements of a good commercial education are growing from year to year. . . . The question of distribution is not less important than that of production."[1]

Definition of Commercial Education. — Classical, literary, scientific, and industrial are terms tolerably well understood as applied to schemes of education. "But," the question is asked, "just what is meant by 'commercial education'?" It is that form of instruction that both directly and indirectly prepares the future business man for his calling. Discussions on commercial education have frequently been confused by a failure to recognize different senses in which the term is used. Many feel that commercial education means narrow technical work of the business college stamp, and they declare against it. It is from such notions that we get discussions contrasting "the Modern Language Course" and "the Business Course," as though they were exclusive. But commercial education means far more than the teaching of bare commercial subjects. Sir Albert K. Rollit opened the commercial

[1] Schoenhof, *Industrial Education in France*, p. 77.

education conference of the London Chamber of Commerce with the statement that commercial education means for one thing the larger and better adaptation of education in general to commercial needs. The business college schools may very properly be termed trade schools. Somewhat akin to these in aim, though more liberal in character, are the colleges and higher schools of commerce. These would make of business a "career"; such schools regard banking, foreign trade, and allied pursuits in the light of a liberal profession, and they have been described as standing "in the same relation to the life and calling of the manufacturer, the merchant, and other men of business as the medical schools of the universities to that of the doctor; they provide a scientific training in the structure and organization of modern industry and commerce, and in the general causes and criteria of prosperity."[1] In addition to the preceding, which are technical and professional schools, commercial education means that form of general education which prepares young people to serve intelligent apprenticeships in business pursuits. Schools that conform to this ideal have predominating the cultural element, and reduce the technical work to a minimum.

[1] Definition by London School of Economics and Political Science. "By higher commercial education I do not mean that which leads a youth to look merely for a higher rate of interest on capital, or of profit in business, but that which trains him to appreciate fully the objects, advantages, and pleasures of a commercial calling. Such an education would fit him to compete with all comers; to be prepared to keep faith with everybody; to value justly whatever is valuable; but not to expect uniformity of weight, measure, custom, or opinion throughout the world." — DR. JOHN YEATS (1878).

Secondary schools of commerce are of this type, and on the business side fairly correspond to the manual training high schools which furnish a similar preparation for industrial pursuits.

Commercial schools, then, are of three sorts: trade, professional, and academic. In the first the vocational element predominates but in a narrow, technical fashion; in the second, the vocational element predominates, but in a liberal manner; while in the third, the academic element exceeds the vocational in relative importance. Business colleges, higher schools of commerce, and secondary schools of commerce, are the names by which these institutions are known.

Classical, literary, scientific, and industrial are not necessarily exclusive as applied to schemes of education. "Manual training," said one of the exponents of this phase of education, led to misconception, and he seriously considered recommending the changing of the name of schools of this type — schools, it is properly claimed, that are not necessarily less literary or less scientific than are the traditional high schools. In all forms of sound instruction there is much of common ground, and special names come from special elements introduced that give character to the whole. In one course or combination of subjects the tone is from the classics; in another from science, and there may be another grouping which shall be distinguished by the study of modern languages and science as the handmaids of trade. If classical education were limited to the classics, it would become narrowly technical,

as would the scientific education limited to systematic science. There is no gainsaying that the phrase "general education" has too long and too largely been appropriated by the classicists. The classics have not, and cannot maintain, a "protected industry" of culture. Educational theory and recent experience have established that sound training, a general education in the best sense, may be obtained by a variety of grouping of subjects. The growth of knowledge, President Eliot sanely says, has made it necessary to define "liberal education" anew.

Education for commerce will disappoint if it be planned on narrow lines. Manual training would have failed had it been limited to shop work. Sound education must produce men; in doing so it may give to them a preparation for professional, industrial, or commercial careers. Much criticism has been directed against public manual training schools, not that they have shop work, but that they are "high schools"; that they fit for college, give training in languages, science, and the like. Pray, have these subjects no meaning to the artisan? Cannot industry be ennobled by more of culture both to its rank and file, and its captains? Because a boy puts on overalls and goes for a part of each day for instruction in shop work, he is not thereby incapacitated for a study of literature, language, and science. Under the head of "Manual Training and Book Work," Dr. Henry H. Belfield, of Chicago, collected information to determine whether the time given to manual training diminished the amount of academic work. Data were gathered from forty-two

institutions, and led to the conclusion, "The general testimony is that pupils taking manual training as a part of their school work, in the regular school hours, accomplish as much academic work as, or more than, those pupils who devote the same number of hours to school work without the manual training." By the indicated division of his time the pupil sees that more general subjects have a practical application, and, in addition, mechanical pursuits are dignified. The mechanic becomes at once a better man and a better mechanic. Commercial education is less technical than is manual training, and the favorable relations here pointed out between manual training and general culture will hold for commercial education, to an equal or greater degree. Sound commercial education is a necessity for the future, for it will give to that large, and increasingly larger, army engaged in industry and commerce, a training that will make them at once more intelligent and efficient.

Changed Education Necessary because of Economic Changes at Home. — A moment's reflection satisfies one of the soundness of John Dewey's fundamental thesis, that social life has undergone a thorough and radical change. It may not be so obvious, but it is just as true that education, to have the largest meaning for life, should go through a change equally as great. The same writer adds that we hear proposals for the introduction of art, science, etc., "deprecated on the ground that they tend to production of specialists; that they detract from our present scheme of generous, liberal culture." "The point of this objection,"

he continued, "would be ludicrous if it were not often so effective as to make it tragic. It is our present education which is highly specialized, one-sided, and narrow. It is an education dominated almost entirely by the mediæval conception of learning."[1]

Business in these days is essentially a new occupation and requires a preliminary training more extensive and thorough than formerly was necessary. Successful men who entered upon their careers thirty, forty, or fifty years ago can hardly realize this, for they laid the foundations of their success before the present highly specialized industrial and commercial period. Formerly it was common for a lad to enter an office or financial institution and work his way to some directive position, but this becomes relatively less possible. Positions of responsibility require intelligence, with accurate and rapid thought, — powers that education alone can give. There may be self-education after a person enters upon his career, but in most cases the one with a limited training becomes a business machine who can do only the things told him. In the period of apprenticeship of the business men who think that special training is not necessary, there was not the common use of the modern instruments of business life, — the telephone, the telegraph, the typewriter, the ocean cable, with steam and electric cars for freight and passenger traffic. These things have come so gradually and so naturally that the present is hardly conscious of a time when they were not in existence, but all these make their special demands.

[1] *School and Society*, pp. 40–43.

The large employer of labor to-day puts his employee into conditions different in nearly every particular from those which he found at the opening of his career. Starting in business without special education is not unlike throwing overboard a lot of young fellows who know nothing of the water, and telling them to work hard and they will be able to swim. It is not strange that the commercial world lays a heavy burden of criticism upon our present systems of education.

More knowledge, better trained intelligence, are required in business — more than are furnished by our existing schemes of education or than were once required. For the largest measure of usefulness and success, business men need a ruggedness of mental strength. One side of the truth was given by a London banker who said when he was asked what he would have a young man know who was to come into his business as an apprentice, "I don't care what he knows, I only don't want a fool!" The fate of a young man in whom the writer is interested was sealed recently in his connection with one of the best jewelry houses in Philadelphia. More than a year he had been in a position requiring faithfulness, industry, and regularity, and here he fairly acquitted himself; then he was moved to another post demanding intelligence, with quickness and accuracy of judgment; but at the end of a month he was returned to his first position with the verdict of the house, "He has no head." Promotion had opened, the way was clear for certain and rapid advance; but he failed because he lacked the qualities of mind.

From every direction the demands are for special knowledge with keenness and alertness, yet our systems of education are in the main those of an earlier era, illy adapted to supply present demands. More is required to-day than ever before from business men, and present demands cannot be met by moralizing on the experience of men who have won success under different conditions and by essentially different means. It is to education that the present must look for furnishing better trained youths, and educators and business men need an understanding as to the requirements of business, and how these requirements can best be satisfied.

Business under modern conditions means vastly more than "rule of the thumb"; commercial education is not to be circumscribed by the mere routine of office work. Production, manufacture, transportation, the organization of industry, the principles and facts of both physical and social environments — all these offer a field of intense practical utility and that can be made a means of mental stimulus as well. The United States has adhered somewhat to the English ideal in making general culture supreme and regarding utility as a "by-product." Professor Ashley well says in a recent magazine article, "Aim at utility, and if the training be thorough no small amount of general culture will be secured as a by-product." The man who learns Spanish for commercial purposes may use it to read Cervantes; and the man who learns chemistry to use in the arts may still be capable of appreciating the atomic theory.[1]

[1] *North American Review*, January, 1903.

The supreme thing after all is that men should be inducted into, not trained out of, the economic era in which they are called upon to live. Industry and commerce have assumed such importance in our national life that they have been given a seat in the Federal Cabinet. Commercial education need not apologize in presenting its claim. "Many kinds of business are becoming more intellectual, less mechanical, than they were. And we want our young people to be so trained at school as to enter from the first into an intellectual interest in their practical calling. It is a pity when there is an impassable gulf between the intellectual interests gained (or suggested) at school, and the intellectual interest in the profession or trade."[1] It is to prevent the lamentable division of intellectual interests and life work that commercial education should be provided for an important element in our communities.

Commercial Education Necessary because of Enlarged Foreign Relations. — As there are successful men who have never had systematic business education, and point to their success as evidence of no need for such, so others dwell on the glorious achievement of our common country as a warrant for the continuance of present education. See, they say, has not the United States taken her place among the world powers? Has she not become a factor in great industrial and commercial undertakings? All this, we are told, is with the education of an earlier

[1] Sadler, "In what Sense ought Schools to prepare Boys and Girls for Life?" p. 12.

era, and the question is raised why there should be any change.

Commercial education would be necessary if the consequences were limited to internal affairs; but trade is international in its complexity. In a peculiar manner recent events have given to this question new significance. For good or ill the United States has been abroad, assumed new responsibilities, and allied herself with new interests. We are no longer insular; protective tariffs are not to be the chief corner-stone of our future prosperity; we are in the world of the open door, of free competition. Whether we approve or not, this is essentially an industrial and commercial age; and whether we will or no, a new element is being introduced into modern education. "The outlook of our time ranges across the seas. Can we deplore it? Would it help matters if we did? The wind bloweth where it listeth. The school cannot create the tendencies of the age, and therefore will do wisely to adapt itself to them." The most conservative may well say, "we have irrevocably passed beyond the old times" and "the problems of the present are momentous."

Safety lies in rightly interpreting the past and planning for the future: an extensive domain with natural resources rich and varied; the Anglo-Saxon race on which there has been engrafted various other stocks; free institutions resting on universal education, — these have jointly contributed to the development of a hundred years. First, rich in agriculture; next, prosperous in manufactures, and building up on seaboard, lake, and river, and by rail-

road, a most extensive domestic commerce — such is the United States of the past. Up to this time we have developed by what may be termed a national ideal; but a great nation cannot permanently live to herself alone. As Leroy-Beaulieu puts it, in the three centuries touched by her national life, the United States has had three dominant interests. In the eighteenth century she secured her political freedom; in the nineteenth she mastered a continent; in the twentieth century she enters on an enlarged career as a world power. The United States is to-day in a position with new responsibilities and new dangers; there is needed the modification of her institutions, — social, industrial, and political, and their adaptation to new situations.

Time has not given the perspective for a satisfactory interpretation of recent great events. We have a new national sentiment; mayhap there are dreams of world power; the United States has already become a factor in great industrial and commercial undertakings and in supplying world markets. In the light of these facts it is necessary to examine anew — perhaps to write anew — our national history; we have new conditions introduced into our economic life, and we need to state again the doctrine which that life bodies forth. All this is of intense interest to the publicist, to the man of affairs and the business man. Foreign representatives of our government, and public servants at home, find to an increasing extent that their duties are within the field of industrial and commercial activity.

To a larger degree merchants are confronted by new situations, and they will find that in the long run they will succeed or fail as they are able to analyze these situations and meet their demands satisfactorily. By agreement of those to be educated, of the experts who are to give the education and of the communities for which it is given, the former indefinite and haphazard training for industrial and commercial life is inadequate and unsatisfactory.[1] The pressing problem presented by present educational discussion in various forms is how to furnish instruction that will satisfy the demands which the age lays at the doors of institutions of learning; how to modernize and adapt our curricula so that while they

[1] Consul-General Mason of Berlin reported in 1902: "Finally, let the American who seeks to develop an export trade of anything to Germany remember that he is trying to be the seller; that, in offering his goods to any foreign purchaser, the tastes and commercial ideas of that customer are entitled to a certain consideration; and that to insist always upon imposing American home conditions of payment at New York — as American currency, weights, and measures — while the goods are still on American soil, simply confirms the threadbare saying that, with all their cleverness as manufacturers and caterers to their home market, our countrymen are, with some notable exceptions, still in the kindergarten class as merchants in the large, international sense of that term."

"In a good many directions we have much to learn in regard to a successful prosecution of foreign trade. The Germans could give us valuable lessons. They are strong in two particulars — strong in the line of technical education, though perhaps not superior to us, and strong in commercial training specially adapted to the needs of their representatives in foreign countries. In this last particular we are lamentably weak. More than half the failures that have come to manufacturers who have tried to extend their foreign business have resulted from the lack of qualifications in the representatives they have sent abroad." — VANDERLIP, "The American Commercial Invasion of Europe," *Scribner's Magazine*, January, 1902.

furnish instruction systematic and thorough, it shall be suited to the needs of a twentieth-century American citizenship.[1]

Economic activity becomes more specialized, and the necessity of exchanging its products increases. When each community was largely economically self-sufficient, and each nation had little dependence upon other nations, production was the chief economic demand to be supplied by education. But the continued international division of labor, with the extensive exchange of its products, brings prominently into play another process, namely, exchange, and this requires men trained to another set of activities, namely, trade. Increased diversified industry at home makes the domestic go-between, the exchanger of goods within the country, a more important factor and requires of him special equipment. At the same time international extension of trade in both imports and exports, now rapidly taking place, makes it imperative that a special type of man be equipped, — a type not produced by our former schemes of education, and not likely to be secured by reliance upon them for the future.

The United States has ceased to be "the Jack Horner among nations"; William McKinley's words are significant, "The period of exclusiveness is past." Outlets are

[1] "Let us, therefore, insure that our people shall be armed, not with the spear and the sword of the ancient gladiator, but with the most modern arms of precision, and, above all, with that intellectual equipment which comes of education, and which is now more than ever essential to the conduct of the business of to-day." — ROLLIT, *Chambers of Commerce and their Functions.*

being sought for manufactured products. If one follows for a brief time the reports of our consular agents stationed in foreign parts, he will find repeated statements of markets available for American goods, but with this qualification, — Americans must go after these in the proper fashion; they must correspond in the language of the people who are to be customers, they must furnish specifications, descriptions, and prices according to weights and measures, monetary system, and language of the country whose trade is sought; they must know trade-mark and customs regulations, understand the packing and shipping of goods, furnish freight rates, master postal regulations, foreign exchanges, etc. Offhand one does not get any notion of how intricate is the problem confronting the merchant seeking foreign trade; he must not only know all the facts above specified for his own business, but also a vast deal about the conditions under which his competitors are working, their freight and insurance rates, and the like. In addition he should know the psychology of peoples and be able to adapt his wares and his methods to national and racial peculiarities. The demands of a broadened trade outlook, and the difficulties which arise from adhering to old methods, are illustrated by a recent note from the United States Consul at New Amsterdam: "A firm in Holland received a cable offer from New York for 2000 barrels of potatoes. As this was a new business, the question at once arose, How many pounds were there in a barrel of potatoes? — American pounds, too, as the Dutch pound

differs from ours. A whole day was lost before the answer could be wired." The consul adds, "Had the offer been made in kilograms, every business man in the commercial world, from Vladivostock to Mauritius, would have understood it instantly."[1] This statement could hardly be true for the average American business man. United States consular reports repeat such information as "trade lost by bad packing," or "through inability to furnish proper specifications," etc.

In addition to all the foregoing, we are frequently informed, foreigners distrust circulars, and will not buy from written descriptions; they demand that a sales agent wait upon them, show samples or models, guarantee quality of goods, standing of his house, and the like. Such is the favor the seller must show to the buyer; such is the price of a foreign trade. Manifestly, a peculiar type of man must play a leading part in this process, — a man not considered in, or provided by, our traditional education.

Let it not be forgotten that in the end training will tell. The getting of markets and the holding of markets is not sentiment, it is not extravagant claims; it is a matter of comprehension of situations, and if we are to insure our economic future we must give to our commercial leaders wide and deep training in the special subjects with which they are to deal. Our experience in the past cannot hold for the future. It might almost be said that the nation has become great and powerful, not by reason of education, but in spite of it. The merchant of the future has

[1] Consular Report, December, 1901.

well been likened to a great general sitting in his own headquarters with map and pencil planning operations for a distant field of action.

> "Mind will rule and matter yield,
> Whether in Senate, tent, or field."

Commercial greatness will not come to the United States without protest and dispute. European nations are not to sit supinely and see a glory that was theirs depart and rest with another. From every quarter are indications that the lines are being drawn, the preparation made for an intense strife, — a war of competition. The victories of the twentieth century are to be economic, and they will rest with the people that can best utilize the agencies of modern, industrial, and commercial life. If the United States is to win and hold her place in this new warfare, she must equip her hosts of commerce and industry with the ingenuity to invent, the skill to adapt, the leadership to organize, and the intelligence to extend.[1] "Our energies and our prosperity will be more fruitful and safer, the more we add intelligence to them.

[1] "Some people are fond of informing us that, in the future, the extension of national trade will depend a good deal on the magnitude and efficiency of national armaments. Be that the case or not, we may at least hazard the prediction that industrial and commercial success will require the fulfillment of four primary conditions: (1) hard work and imaginative power on the part of directors of industry and their organizing subordinates; (2) the harnessing of applied science in the service of business; (3) intelligence and skill among the rank and file of the industrial army; and (4) not least important, honorable fidelity to contracts, expressed and implied." — MICHAEL E. SADLER, "Impressions of American Education," *Educational Review*, March, 1903.

Here, if anywhere, is an occasion of applying the words of the wise man : 'If the iron be blunt and the man do not whet the edge, then must he put forth more strength; but wisdom is profitable to direct.'" (Arnold.)

Relation of Commercial Instruction to Existing Educational Organization. — A consideration of the schools above mentioned (p. 8) requires some statement of the place these will occupy in relation to existing organization. The narrow technical course of the business college type is properly for those who can not or will not attend secondary schools. This technical work as a form of trade school may well be offered in public night schools, Young Men's Christian Association courses, evening business colleges, etc. The "continuation school," for those who are otherwise unable to go beyond the elementary school, may thus become an important agency of adult education. The German continuation schools (*Fortbildungsschulen*) offer an interesting illustration of a form of education beyond the elementary school, closely related with the elementary school, yet designed for those who find it necessary to seek employment at about fourteen. (For an account of these schools see p. 79.) This is the old question of society's self-protection; those who go from school before they are fourteen *will be educated*, if not in the school to discharge their civic and economic duties, then on the street, in the saloon, or socialist club, to be the enemies of the state. If men are to be safe members of modern society, they must be taught to perform those duties which society imposes. "When a man teaches

his son no trade, it were as though he taught him highway robbery."[1] A successful appeal can be made to these classes, if schools are offered which give them an opportunity of bettering their station in life, — that is, of becoming economically more efficient. That there is a present unsatisfied demand for adult education is shown, among other things, by the success of public lecture schemes in New York and Boston, the continued popularity of university extension and the Chautauqua system, and the evening courses of business colleges and Young Men's Christian Associations. Preferable to any of the foregoing, because more definite as a means of education, and furnishing a better equipment for the demands of the time, would be logical, rational courses in institutions articulated with and a continuation of the elementary schools.

The persons who are most in need of instruction beyond the elementary school have not responded in any measure either to university extension or the Chautauqua system. Says Consul Monaghan, of Chemnitz: "The supplementary schools are for the people who have to work, what Chautauquas, summer schools, and university extension are for others." The Leipzig *Oeffentliche Handelslehranstalt* has for years had as one of its aims to give to those already in business the general and special training necessary for their callings. To this end instruction is provided in two courses: one, more technical, for one year,

[1] "No boy or girl is safe in this age without a knowledge of some employment in which daily bread can be gained. Teachers should avoid being too scholastic." — DR. E. ORAM LYTE.

planned for those who already have the general training represented by our secondary schools, and the other for three years, more general, and more nearly corresponding to our commercial high schools. The German scheme regards the continuation school as a place for serious work, there being instruction two hours per day for five days a week. Instruction is arranged in the morning from 7 to 9 o'clock, also in the afternoon from 2 to 4. With us the afternoon hours of the Leipzig school would prove unsuitable, but if the hours were fixed from 7 to 9 A.M. and from 4 to 6 P.M., many employers would, beyond doubt, grant their younger helpers a slight shortening of the hours of labor that these laborers might become more efficient.

Specialization in business subjects should have at least the foundation of sound elementary training, but it remains true that the training of the elementary school, as all other education, may be too bookish, oriented to a past era rather than to the present. The study of the humanities too often has meant one's "self-estrangement," the getting out of harmony with his social environment, neglecting the "race's fund of experience" and its "common life."[1] It is good pedagogy that teaching of any grade and of any subject can be made more attractive and effective by giving it a practical turn.

The secondary school should give a certain amount of technical commercial instruction, as well as a modern education bearing on commerce. In addition to this form of school, and also organically related to it, as it

[1] Harris, "Notes to Rosenkranz," *Philosophy of Education*, p. 51.

is related to the elementary school, there should be the college or university of commerce. Different phases of these institutions will be discussed later; suffice it for the present to give the general view. Good elementary education up to about thirteen or fourteen; good technical business schools for those compelled to begin work shortly after the age just given; secondary schools with a commercial bent for the period from fourteen to eighteen or nineteen[1]; and crowning all, the higher commercial institutions, — such seems a rational ideal for American education.

Commercial Education in Relation to General Education. — Widening courses of study, as above suggested, will make them attractive to wider ranges of interests, and an increased number will go on from one grade to another. As pointed out by Seidel, technical instruction is not a substitute for, nor opposed to, general education; rather it is the most effective means of securing a general education for a large class. There is much truth in the statement: "We can conquer the uneducated and half-educated people of this country for secondary and higher education only by offering them courses of study which, while they are of a strictly *educational* character in the best sense of the word, shall also have some bearing on their future everyday life, shall have some

[1] "In my judgment we have no right to take a man's child from him, and keep him until he is fifteen, or to induce a man to trust his child with us until he is fifteen, and then hand him back, unable and unfit to earn his bread." — WENDELL PHILLIPS. About this unqualified statement there is some question, but the ground for question is slight, if to fifteen we add three more years.

direct relation to the work they are called upon to do in the world." A professor of Latin in a state institution of learning said recently: "I favor commercial high schools and commercial courses in higher institutions of learning, not only because I think they are needed, but because their establishment will directly and indirectly help the classical courses." If we examine the facts for the attendance upon the secondary schools, we shall find that in most communities young people from fourteen to eighteen years of age can get employment and contribute to the support of themselves and others. Set over against this that to the homes from which these young people would come, their coming means sacrifice and deprivation, and it can be readily seen that the decision will depend upon the practical consideration of the probable outcome of pursuing the school's course. To the community at large the high school is too often regarded as the sacred portal to the college, a luxury, all well enough for those who can afford it, but as not suited to the needs of those who are to face the sterner realities of life. The high school needs to be more largely brought into relation with the life of the present, and if so its usefulness will be much greater to those who now avail themselves of it, and the number who do avail themselves of it will be largely increased.

It can hardly be expected that there will be general agreement with the statements here made. As Herbert Spencer observed, there are three phases through which opinion passes: First, a unanimity of ignorance and

indifference, which, if it is followed by a disagreement of inquiry, leads, in the third case, to a unity of sound opinion. While disagreement characterizes present discussions, it in itself augurs well for the future. Educational progress in Prussia, for example, has been attended by the intense bitterness born of devotion to conviction. Sadler quotes from a German observer that their educational parties "fight among themselves, . . . with the ardor of religious fanatics."

The principle of election of studies in school and college is pretty generally granted, but it remains to ask, For what classes are provisions to be made, and what shall be the manner of election? Already courses are given looking to preparation for the professions and industrial life, but up to this time slight regard has been entertained for those who are to enter on business pursuits. Indeed, our higher training has been in the main a stimulation to the so-called liberal professions, and our educational machinery must bear the onus of their present overcrowded condition. On the other hand, trade, if well regulated, can scarcely be overstocked. Rather, "it flourishes by multitudes," and increased attention to it means progress, both material and intellectual. The offense of educators in taking men out of their natural station is not new; three centuries ago an English worthy arraigned the methods of teachers of his time in terms that suit present practices. Scarce a tradesman's son learned grammar well, said he, but a country schoolmaster declared he would make a scholar,

and forthwith all the lad's kin would cry out, "What a pity so hopeful a youth should be lost in trade!" In consequence of which, we are told, many good tradesmen were lost, and poor scholars made. Instead of feeling that scholars shall be lost in trade we ought rather to feel that without them in it, we shall lose both scholars and trade. Instruction should show that commerce in itself offers opportunities for the most useful and attractive careers.

Heretofore systems of education have helped, to an unfair degree, those who are to enter on literary pursuits, the learned professions, and the like, and merchants have asked the question, Why is so little done for the commercial class by the state, especially for the education of those who contribute so largely of the taxes that the modern state requires? Education for commerce means better provision for that important element of modern society, the business community. Adequate provision is not made if a few disconnected subjects be added to existing courses. The demand has not been satisfactorily met if commercial instruction be given by the untrained and disinterested instructors of existing faculties, or with the most inferior equipment of existing institutions. Theoretically, the establishment of business education is sound; practically it is just, and this whether regard be had for those who most largely pay for public education, or for those who are to receive its benefits. Seidel, not without reason, asks how so large an expenditure of money and energy for public education can be justified

if the school makes no contribution toward the child's equipment for life? From every fair consideration the demand of the time is for schools more closely articulated in themselves, and better adjusted to existing conditions. Schools are needed which will give sound training, but which at the same time will furnish a more thorough preparation for practical affairs; in supplying this need business schools are a necessity.[1]

Commercial education in this country is fairly entered on its formative stage, and the next few years are to be its critical period. Let us not deceive ourselves with the comforting thought that there is no problem, or that it is easy of solution. Our higher schools are too isolated from the communities which support them and for which they exist; higher training of school and college, to a larger number, and as a preparation for participation in social activity, is an imperative demand that can be met only by rational changes in the present aims and methods of education. School and college must conform to an education "of the people, by the people, for the people." The question that commercial education asks to-day is: How make students "learn for life" while at school? Its aim is to emphasize the dignity of vocation; it seeks to harmonize in some measure, training for life and training for liveli-

[1] Clarence H. Poe has given a striking statement of the necessity of applying education to life in quite a different field. ("Farmer Children need Farmer Studies," *World's Work*, August, 1903.) He arraigns city text-books and city teaching and finds them primarily responsible for lack of interest in education in rural communities, for ignorance on matters of agriculture, and for the too general dissatisfaction with their lot by country people.

hood. As pointed out by the late English Special Commissioner, the task is not so simple as it looks at first sight.[1]

From the foregoing, it is seen that education is not an unchanging thing, and that commercial education means general as well as special education. Commercial education has been shown to be necessary from the changed economic conditions at home and an enlarged foreign outlook. The establishing of the form of education with which this book deals has been regarded as a step in our normal educational development, and, finally, it is urged that commercial education should find a place supplementary to our elementary education, and as part of the education of secondary schools and colleges.

[1] Mr. Sadler suggests that the "thorniest" problem of all is to determine what life is to be.

CHAPTER II

Possibility and Value of Commercial Education

General and Technical Education. — The preceding chapter attempted to make clear what is meant by commercial instruction, and to indicate the place which it should occupy in the present economic order. The statement, however, was largely theoretical, and it is now necessary to consider in some detail two important questions: Is special training for business possible? And if so is it practically worth while? Liberal education has popularly meant one thing only in this country. On the other hand, technical education in any fair sense has not been extended to preparation for commercial duties. Probably two facts explain these conditions: First, our inherited notions of education have given an undue emphasis to the humanitarian element; and second, business instruction has been thought to be impossible. An undue regard for the humanitarian, however valuable it may be to those having certain antecedents, of certain conditions in life, and who wish to prepare for certain future careers, cannot but weaken our general education, no less than it would be weakened by an undue regard for the practical. The education at present required is not merely literary,

not merely technical; it is a proper combination of both these.[1] Education for its own sake is not wholly in the right, no more than it is wholly wrong. On the other hand, practical considerations alone cannot be made the rule and guide in matters educational. We need at once an enlarged conception of the notion of liberal education, and a liberalizing of the elements that are practical. The definition of education by John Milton ought to stand for our time and for all time: "I call therefore a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war."

That there is a true theory in business, and that education can contribute to the understanding of it, would seem clear, it has well been said, from the fact that there is a good and a bad, a true and a false, way of doing every-

[1] An Englishman writes: "It is sometimes supposed that the question here raised is between a 'liberal' and 'technical' training, between the culture of the mind and the preparation for a career. But this view is a narrow and a partial one. It is characteristic of our traditions that we often confine the term 'liberal' education to the study of words and language, while all methods of training in other and more concrete modes of expression are apt to be called 'bread' studies." — H. LLEWELLYN SMITH, in *Studies in Secondary Education*, pp. 188–189.

"For myself, I have long looked forward to the time when modern and classical education should be fused, or nearly fused, together. The fusion would be easy if boys proceeded through the study of modern foreign languages to the study of Latin and Greek, and if the scholarships given to boys on leaving school, both by schools and by the colleges at Oxford and Cambridge, were awarded after examinations which mainly recognized the older studies, but at the same time included a large modern language element, and if the teaching of Latin and Greek were transferred somewhat from the schools to the universities." — POLLARD, *Commercial Education*, p. 129.

thing. But business success has been popularly regarded as a *hocus-pocus*, beyond explanation, and challenging instruction. Successful business men are thought to be born, not made. Without doubt, all of us have heard in some form an expression of the sentiment referred to by Mr. Sadler, "If you are educated you can't make as much money as you could if you weren't." In the conversion of baser metal into gold, which unfortunately has been too largely the measure set on business success, there has been conceived to be some alchemic process beyond the ken of those not born with the favor of the stars. This conception, false for all time, is in the present more obviously false. Money-making is not the sole end for which business is, or should be, pursued, though, as has well been said, for the majority of men who pursue business merely for making money it is probably as harmless an occupation as any in which they could be engaged.[1] First of all we need new ideals of business success, and

[1] An English writer has recently said that it is a great mistake to think that Americans are devoted to money-making for money's sake. The dominant passion, he says, is to win the struggle, to triumph over difficulties. Hugo Münsterberg, speaking from the German standpoint and after close familiarity with American conditions, says: "The American business man hunts success very energetically, but he does not care for money itself. He wants a fortune because, in a country without titles and orders, wealth is the only measure of the worthy." Of J. Pierpont Morgan it is said, "He works not merely for money, but for the sense of power; probably most of all for the intellectual exercise which is afforded by moving the world's greatest interests as an ordinary man places pawns and knights and queens on a chess-board." — *Cosmopolitan*, January, 1903. Might not Mr. Morgan's effort be compared to that of a metaphysician grappling with an intricate problem, or of a musician interpreting an artistic composition?

then to an increasing degree the demands will be for more knowledge and greater power in using knowledge.

Those who believe that commercial training is unnecessary have said that the traditional instruction was adequate, that it gave incidentally all the educational equipment which merchants needed. People who so answer feel that they are the products of and sponsors for an existing educational order; a justification (often unconscious) of themselves, and their training, makes educated men hostile to innovation. The educated class is conservative. Thus it was, as Huxley tells us, that after Greek had been introduced into Europe in the Renaissance period it took two hundred years for it to get recognition at the universities; thus it is that great educational reforms have come originally not from within the universities but from the outside. Persons of the class here noted are formalists of educational theory, who believe that if an instrument of education has any practical value, its efficacy is thereby destroyed. This cult found its extreme illustration in an English university professor who completed an ingenious and difficult demonstration in mathematics with the statement, "The beauty of that proof is that it can never be of any practical use."

From pure formalism of classics and mathematics, education passed to recognition of the practical utility and educational value of natural science. Similarly we are coming to acknowledge both the utilitarian and cultural worth of the social sciences. Time was when education's sole function was to fit men for the church; at another period its aim was to equip for participation in the politi-

cal life of the state, *i.e.* for civic duty; we have already entered upon an era when men are recognized as parts of an industrial order, and education must train for an economic citizenship. It is with social science and the demands of this citizenship that business education must deal, but it need not neglect the other purposes of education.

On the other hand, commercial education has been thwarted and delayed by eminently successful business men, who have not the training of the schools themselves, and who can see no connection between systematic instruction and practical success. With these, success is to be won by integrity of purpose, native shrewdness, and tireless industry. Such men are saying every day, "I am Joshua Bounderby of Coketown; see those chimneys; I started with limited education; what I have done others can do."

Of all occupations business has the least regard for special preliminary training; no other activity of the present has so indefinite a standard of preparation for those who would enter upon it. Years of education and apprenticeship are required for craftsmen, while those who would enter on professions have prolonged advance study. Again, in the pursuit itself there is for all kinds of manual work, and for professions, pretty definite agreement as to what one must do to succeed. Complaints against young men in business are oft-recurring. It is said that they are formal and mechanical, and that they lack in faithfulness. The probable fact is, employees are not less intelligent or less

faithful than those of a generation ago. That they do not meet the needs of modern business life is due to their employer's lack of understanding them, to their lack of understanding their employer, or to the failure of both to comprehend and meet the present situation. Present necessity is for men who shall have coupled with sterling character the ability to do work. General and technical education must be so related as to give the proper balance between character and ability. Education has been belittled by making it over-practical, and there are still those who take their cue from Dickens's Squeers, who, after having taught his pupils the definitions of horse and garden, sent them to curry the horse and weed the garden. Should a second Squeers be created, as with the first, many teachers would regard themselves the subjects of a caricature.

Six successful men were named recently, no one of them having been to college, and the deduction was made that a college education was not desirable. Six times as many illustrations on either side would prove nothing. What after all are the present conditions, and what technical and general education is recognized to meet them? As President Eliot says, "To deny that young men may be systematically trained for industry and commerce is to assert that industry and commerce are merely imitative arts, to be acquired only by seeing other people do the tricks and then practising them." No one maintains the latter. "Laws are as plainly written, and are as unalterable in their effects on commercial transactions as in the operations of nature. To understand these laws

and their working a student must *study* just as much as if he wished to become a botanist or other man of science, and this study will fit him, in its highest development, for the duties of a leading man of business, whether manufacturer, merchant, — large or small, — ship owner, or agent; for a consul, a president of a chamber of commerce, or for a statesman." [1]

In commercial life to an increasing degree the question has become, "What can you do?" in addition to "What do you know?" The man seeking to satisfy the present demands of business must know a great deal, but he must also have skill in the doing of something.[2] To get the

[1] Yeats, *The Golden Gates of Trade*, p. 171.

[2] The following question was propounded by one in attendance upon the Conference on Higher Commercial Education at the University of Michigan, 1903. GIVEN: A young man who has finished the complete four years' course in the Higher Commercial Education, such as offered by the universities in the United States; in what way is it possible for him, in the most expeditious manner, so to place himself in touch with the actual conduct of affairs either in manufacturing, transportation, wholesaling or retailing, that he may, without unnecessary loss of time to himself, take charge of and conduct successfully some important commercial enterprise? In other words, how may such a young man most advantageously place himself so that, while he is earning a living, he may at the same time learn from those who are actually conducting commercial affairs? The answer which suggests itself is, either in recording the transactions of the business as a bookkeeper, or in taking the letters as a stenographer. Many men have gained the familiarity with the business that led to promotion, in the stenographer's position. (See the paper by Mr. John Soby of the Remington Company, "The Stenographer in Demand.")

Men trained in schools of engineering and technology are required to serve apprenticeships in industrial establishments. The advantage of their training is that it shortens their period of apprenticeship and they are more efficient. Foremen, superintendents, and master workmen are thus created out of men of higher technical training. Similarly both commercial education and expe-

balance between knowing and doing, and between general education and technical education, is the task. For many persons the time element enters in such ways as to make the most desirable arrangement impossible.

> "Could man be secure
> That his days would endure
> As of old, for a thousand years,
> What things might he know !
> What deeds might he do !
> And all without hurry or care."

Several other matters should be taken into consideration as bearing on this question. One is what Professor A. C. Miller terms the development of aptitude for business. This is as possible for the candidates for business as is the development of similiar aptitudes in those destined to other callings. The business man needs the ability to deal with and manage men. Power to do this can come only from a combination of general and technical knowledge, and skill.[1] Again, the man who would have a large measure of success must have clear and intense or vivid ideas of the things with which he deals. Such ideas may be given in advance of a business career by technical instruction in the schools. All these must be realized without sacrificing other ends. Booker Washington's creed bears directly: An education that trains the head

rience will be necessary to train the future merchant prince and captain of industry.

[1] For a discussion of the importance of general and technical education in their relation to social welfare, see Jones, *Economic Crises* (Macmillan Co.), pp. 212 *sqq.*

only to the neglect of heart and hand is not a broad or liberal education; and an education that gives people wants without the means of satisfying them, is a dangerous education. The Quaker William Penn gave it as his opinion that practical instruction is better than riches, for, said he, it will secure riches, and what is more important, the esteem of friends. It is this practical instruction in commerce that should be "invented with discriminating foresight, established with prudence, and maintained with liberality."

Importance of Trade. — Economic organization is deserving a place with other institutions that contribute to social well-being. Whoever adds to the commercial intelligence that gives larger and more varied sources for social consumption, or that enables sources already known to be better utilized, is a benefactor. The first step in progress was when men learned the lesson of their mutual dependence, — their own insufficiency. The means by which this limitation was overcome was trade. The part of the tradesman has ever been a worthy one — "The merchant, who opens out the world to enterprise and makes nature's earth-gifts known to mankind, claims of right to be one of the great active pioneers of civilization." Moreover, it is a mistake to feel that devotion to trade betokens a "mean and money-grubbing spirit." Trade is the avenue through which established civilizations reach out to less fortunate lands and peoples. David Livingstone rightly looked to trade as one of the agencies to civilize Africa. For four centuries the spirit of coura-

geous hardihood born of trade has been, barring religious zeal, with which it has gone hand in hand, the chiefest force in the world. Trade first "plowed the furrow round the world," scaled lofty mountain barriers, threaded trackless forests, and braved the dangers of settlement in remote and unknown lands. The motive of the daring mariner of all ages who put to test the theory that the East might be reached by sailing to the West, is not accounted for on the sole basis of religious fervor. He regarded the physical needs of men in this world; with him, and rightly, bodies as well as souls were to be ministered unto. We have a common heritage with a people that by trade have been stimulated to grapple with seemingly insuperable obstacles. Trade, then, needs no apology; it should not cringingly ask favors; it can come for its due with the confident assurance that it has wrought mightily for world-progress. Trade can point with pride to its devotees, certain that these have been instruments of progress, that they have contributed to the welfare of their generation, and the future. "Trade," says Freeman Hunt, "discovered America in the vessels of adventurers, seeking new channels to the old marts of India; trade planted the American colonies, and made them flourish, even in New England, say what we please about Plymouth Rock; our colonial growth was the growth of trade — revolution and independence were the results of measures of trade and commercial legislation, although they undoubtedly involved the first principles of free government; the history of the country, its politics

and policy, has ever since turned chiefly upon questions of trade and of finance, sailors' rights, protection, banks, and cotton."[1] By the side of this should be placed the panegyric on trade by the old English merchant, Thomas Mun: "Behold then the true form and worth of foreign trade, which is the great revenue of the king, the honor of the kingdom, the noble profession of the merchant, the schools of our arts, the supply of our wants, the employment of our poor, the improvement of our lands, the nursery of our mariners, the walls of the kingdoms, the means of our treasury, the sinews of our wars, the terror of our enemies."[2]

But it is in modern times that the work of the trader is of greatest importance. The interrelation of remote sections, complexity of production, and diversity of consumption unite to give to the merchant a more significant place, and to demand for him general and technical knowledge on a wider range of interests. "To the merchant, no man who can trade is a foreigner. His wares prove him a citizen. Gold and silver are cosmopolitan."

Trade as a part of an economic institution has been, and is to be, an important factor for better life; in order that it may serve its true end, those who occupy the place of merchants and tradesmen need more complete equipment for their callings. They need to recognize what is termed "the science of society," one of the most

[1] *Work and Wealth*, p. 504.

[2] *England's Treasury by Foreign Trade* (first published in 1664, but written *ante* 1630; Economic Classics edition), p. 119.

elusive of conceptions, but one worthy of inquiry from him who would fill the place of merchant in modern economic organization.[1] "Yet one more science have we to note as bearing directly on industrial success, the Science of Society. Without knowing it, men who daily look at the state of the money-market, glance over prices current, discuss the probable crops of corn, cotton, sugar, wool, silk, weigh the chances of war, and from all these data decide on their mercantile operations, are students of social science: empirical and blundering students it may be; but still, students who gain the prizes or are plucked of their profits, according as they do or do not reach the right conclusion. Not only the manufacturer and merchant must guide their transactions by calculations of supply and demand, based on numerous facts, and tacitly recognizing sundry general principles of social action, but even the retailer must do the like: his prosperity very greatly depending upon the correct-

[1] "I much mistake, therefore, if we are not entering upon a period of great transitions, a period of difficulty and many dangers. The whole structure of industry and social life is liable to be subjected to a strain — possibly to a shock — for which experience furnishes no guiding precedent. We have settled the administrative questions; we can collect taxes, build court-houses, and pay the policeman. We have settled the political questions; for the nation lives and will live, the greatest and grandest in all the earth. But the further test is now to come, the test of the ocean liner and the limited express. Can we settle the economic questions? Can we raise this wide realm of industry from selfishness to charity, from strife to friendship, from competition to coöperation, from the warring instincts of the savage state to the larger and nobler needs of associated life? This is the problem which steam and electricity present for solution." — MARTIN A. KNAPP, "Social Effects of Transportation," *Annals of American Academy*, July, 1902.

ness of his judgments respecting the future wholesale prices and the future rates of consumption. Manifestly, all who take part in the entangled commercial activities of a community, are vitally interested in understanding the laws according to which those activities vary."[1] In his work on "Industrial Education" Robert Seidel would apply what is here urged for commercial instruction, to all forms of training; a knowledge of social conditions, he concludes, should be at the basis of every scheme of education.

Commercial instruction can contribute to a better regard for society's intricate industrial organization; in addition such instruction will at once equip for economic leadership, and for efficient service in subordinate positions. This is more than the training of heads of departments, general superintendents, and the like. The success of the commanders will depend largely on the quality of the men who serve under them. "How vastly would the work of production and trade enlarge were the rank and file all so efficiently trained as to be faultless in the discharge of duty though not competent for the rank of commanders." The men engaged in commerce, and society at large, need a new estimate of the importance of commerce. Business men have opportunities to perform in business splendid social service, to be real benefactors. Men of affairs should be led to look to affairs directly as means of progress, instead of relying entirely on indirect agencies that are offsprings of business success; — thousands of operatives

[1] Spencer, *Education*, Authorized American edition, pp. 51–52.

more intelligently trained for their special callings, with higher standards of living, with a new intellectual and economic outlook, — surely this is a substantial gain not to be surpassed by founding schools to educate men out of their economic station, or endowing institutions to care for the economically unfit.[1]

Enlarged Education from Enlarged Conception of Commerce. — America already is and should continue a world power in affairs industrial, commercial, political, intellectual, and religious. With fuel practically inexhaustible, and rich stores of ore, with limitless possibilities of agriculture, who will undertake to say what this country may become with men trained aright? We were an agricultural people, restless for more land, yet in 1897 only about one-sixth of the area of the United States was tilled, with three times as much possible of profitable tillage.[2] This greater America has, and is to have, diverse industry. When our fathers limited their tillage to one crop, the land must lie fallow at frequent intervals; but multiplication and rotation of crops have made it possible to use the land year after year and to get each year a greater product than formerly. Similarly, the country that is limited to one sort of production, or to one industry, is most subject to the eccentricities of fate. Paradoxical

[1] "There is an opportunity in business not merely to earn a living, not merely to provide for one's family, not merely to heap up wealth which may be used to found a hospital or college, but to confer blessings of incalculable benefit upon mankind by improving the processes of business itself."—JAMES, *Plea for Establishment of Commercial High Schools*, p. 16.

[2] Gannett, *Building of the Nation*, p. 237.

as it may sound, it is true that no nation is so near to starvation as the one that gives herself wholly to the raising of food products. With an agricultural industry alone, the United States was always at the mercy of European buyers and European manufacturers. As producers of the staples cotton, rice, and tobacco, Southern states remained poor; but with improved transportation which made available Northern markets, the South adopted diverse agriculture, when she prospered, and there came a "New South." And now manufactures are planting themselves in the Southland, and the door to the endless progress of that region has been opened. The United States has gone on diversifying her industries, multiplying her productions, until her present achievement is the marvel of modern times; yet the new era has but begun. Already we have surpassed the world, but, as has been observed, the race is not to the swift alone; to hold our proud position, we must surpass ourselves.

While our achievement has been great, it is an achievement with instruments differing from those of the present, operating under different conditions. To hallow any scheme of education and demand that it shall be preserved without modification is the essence of conservatism. Such a policy for the United States errs, in not regarding that we as a nation have enjoyed marked economic advantages because of rich natural resources and the large importation of capital and labor from more settled countries, — advantages that are peculiar to the early stages of development. The demands from those instructed are

ever increasing, and if instruction is not to fail, both its instruments and its methods must be ever expanding.

Standards of Success. — In France the character and the success of the merchant have been objects of scorn; in England and America there has been less despising of commercial careers, but there still is too much of distinction between callings, as though the more "genteel" were the more honorable. A Frenchman has recently said that they ought to be rid of the superstition attached to the "liberal" professions. He asks: "Why is not agriculture as liberal a profession as that of an attorney? A liberal profession is just worth what its actual votary is worth. An indifferent physician, an average barrister, a third-rate *littérateur*, are singularly less interesting beings, and of much less social value, than — not only an intelligent manufacturer, but even a good farmer, a clever and honorable tradesman, or a skillful workman, whether mechanic, carpenter, or mason."[1] A generation ago Hamerton thought he detected that the "absurd prejudice" against commerce was declining, but there is still too much of what he termed the want of understanding among classes, especially between those that follow careers dealing with intellectual and material things. An inquiry after the welfare of a family elicited the following response: "Tom turned out 'fine,' — he's got to be an actor; Bill's an artist, and Melindy's a 'swell' music teacher; but John, he never amounted to much, — it took all he could make to support the others." We have too much of

[1] Cited in Demolins, *Anglo-Saxon Superiority*, p. 322.

the spirit of these remarks in our estimate placed on careers.

This is a matter which concerns success in trade as well as the general welfare. "Commerce," spoke J. G. Gilbart, "will never flourish in a country where young men, whose fathers are barely able to maintain a genteel appearance, think it beneath their rank to enter a counting-house. Commerce will never flourish in a country where property acquired by industry is considered less deserving of respect than property acquired by inheritance. Commerce will never flourish in a country where men in business, instead of bringing up their sons to the same business, think it more respectable to send them to professions. Commerce will never flourish in a country where men, as soon as they get a few thousand pounds by trade, are anxious to get out of trade, and to mix with the society of the fashionable world." It is education that must correct these false standards. To quote Gilbart again, "Is it knowledge that gives respectability? — What profession requires so much, and such varied knowledge, as that of a merchant? Is it utility to the state? — What order of men tend more to increase the wealth and happiness of the state than that of merchants? Is it moral character? — To whom is moral character so essential as to a merchant? Without this he is despised."[1]

Advantages to Business from Better-trained Men. — Thus far the subject has been considered from the standpoint of social order; let the view be narrowed to business as a

[1] *Lectures and Addresses*, p. 86.

whole, and finally to a treatment of the individual business man. In a golden age for merchants, Sir Francis Brewster said he knew of no subject "more writ about" and "worse handled" than trade. It was to him a "distemper in trade" that so few men of wide learning were found in it. If, said he, there were the same care to have the best men in mercantile pursuits that there is to have them in the law, the nation would be more prosperous in her foreign relations and would spend less on lawsuits at home.[1]

Commercial pursuits need the *esprit de corps* that will come from business training along liberal lines. Such institutions as the Leipzig *Handelshochschule*, the London School of Economics and Political Science, and the colleges of commerce now inaugurated or proposed for several American universities, can but give to business a new tone in itself, as well as a new place in the range of occupations. Already, we are told by the penetrating critic, Mr. James Bryce, commerce is looked upon differently; classes which two centuries ago regarded it with scorn are now keenly interested. Liberally trained men are those who regard business with new interest and give to it new meaning. Statistics of seven thousand Yale graduates taken for a hundred years indicate a significant movement in the change of occupations of college graduates,—a change likely true for the country at large. A century ago, law, medicine, divinity, and teaching absorbed 92 per cent of the graduates of Yale; in 1898 the same professions claimed 62 per cent. Business pursuits a century

[1] *Essays on Trade and Navigation.* London, 1695.

earlier received 6 per cent, later they got 31 per cent. In the century the percentage of those who enter the ministry had fallen from 39 to 6 or 7. The first fifteen classes of Yale gave 78 per cent of their members to the ministry. For one hundred years 40 per cent of Yale's graduates became clergymen. Among Yale alumni business passed from being fourth in the list of occupations to third in 1842, and to second during the Civil War, and the Yale statistician expressed the belief that business "presumably will wrest the first place from the legal profession."[1] The expressed intention of their futures by the graduating class at Yale in 1904, was as follows: 112 said they would go into business, 85 into law, 24 into medicine, 25 into teaching, 9 into the ministry, and 26 will go into what is classed as special work.[2] A warrantable deduction from the above figures is that business is demanding better-trained men, and that already colleges are beginning to meet the demand. "The typical college graduate now becomes a man of affairs as well as a scholar in the old sense." The typical college course has meant most largely a "luxury of culture," but it is a cause for congratulation that it is coming to mean to an increasing number, "a necessity of life." A higher education limited in scope has not properly served its constituency. Higher education owes the debt of business training, and business needs the influence of culture.

Business Men as Men of Affairs. — Commercial education is not solely an academic question; it directly concerns

[1] *Yale Review*, November, 1898. [2] Person, *World's Work*, May, 1904.

public welfare. No other epoch has had so many business men in public life. The supremacy of the lawyer as a leader is threatened; his hope is to add to his narrow legal training, for which he will have less use, familiarity with industrial and business affairs. Men of influence in recent years are Aldrich, Depew, Wanamaker, Gage, Platt, Hanna — business men all; and upon these and their like rest the destinies of the hour. The training, the judgment, and the success of a business career give new claims for preferment to public office; when there have been matched against these qualities mere legal skill and ability in public speaking, the stable qualities have won. So frequently have business men been chosen to the United States Senate that a conservative journal terms the tendency "commercializing the Senate." Distinguished ability can to-day be found in every branch of business, and business men are foremost in their communities, — those who make and wield public sentiment. Materialism, it has been said, is an "evil spirit that has given its cup of sorcery to youth and beguiled them from the paths of noble scholarship and the intellectual life." A distinguished clergyman recently commented on what is thus felt to be the lack of genius, and explained that there is as much genius as ever, but it has gone more largely into commercial life, where the world at large does not recognize it as genius. It is impossible to limit the truly great to a narrow business calling, hence their lives flow out to larger interests and they become men of affairs.

Consul-general Mason, in a recent report on "The Edu-

cation of German Consuls," shows somewhat of the new duties demanded. Under the old system the chief work of the consul was to protect subjects living abroad. Then they were to be educated as lawyers; they needed to know international law, diplomacy, the history of treaties, and the like. Now there is set the standard of knowledge of industrial processes, commercial values, mercantile usages, opening markets, etc. In ten years there has been developed a new situation in Germany, and if we have not realized such a period of change, we are fast approaching it. Diplomatic questions, too, are matters of business to an amazing degree. The foregoing are facts to be reckoned with; and grave dangers may be connected with them, but they are facts. The deduction is obvious; if business men are to rule the world, let education set for itself the work of forming a better type of business man.

Business as a Profession. — It is to be regretted that many who enter upon business careers at present have so little preference for what they do. Things that most concern them are — length of day and salary; they are so blissfully ignorant, and so self-assured, that they are ready for anything from lumber to dry goods. Business men who advertise for helpers, know that those who respond have neither special aptitude and training for, nor special interest in, any line of work. It is with them a matter of indifference whether they keep books, weigh iron, or sell and measure silk; they are willing to drift at so much per week. Vague and purposeless education that ignores the world in which one lives, and the careers

open to him, is largely responsible, and this is a fault peculiar to no single locality or grade of school.[1] Education is a laggard that follows too tardily industrial and commercial progress. In recent years forms of manual training have been introduced, looking to the education of hand, eye, and æsthetic sense of those who are to be artisans. Manual training aims to make an artist in preparation for the artisan that is to be; it seeks to make a man more than a hewer of wood, or molder of iron. The one equally ready to become a wood worker, or a metal worker, might well be distrusted as unfit for both. Similarly, a larger measure of success in commercial activity awaits those who get a special training in advance of their careers, a training that shall give them ideals and a power to realize these. Let it be understood that business success ought not to be measured by dollars, but rather by the influence that one's business has upon himself, and the social service it renders. Business activity is too often misdirected effort to attain a false standard. Much of it is unsatisfactory, leaving its devotee sordid and callous, and creating strained rela-

[1] "The fault which so many business men find with young men at present — possibly they have always found the same fault with them — is that their interests seem divided, they do not seem to be able or willing to make the interests of the firm their own, the results of their college training do not appear in enlarged vision, breadth of horizon, quickened perceptive faculties, accurate observation, and the ability to express themselves forcefully and attractively." — J. H. CANFIELD, cited in Mark, *Education and Industry in the United States*, p. 126.

May not the "fault" here noted be in part at least the result of faulty education?

tions between himself and those with whom he deals.[1] A new standard of business ethics, a new ideal of business duty, is necessary, and this, it must be agreed, education, and education only, can give.

A very general report upon young men in business is that they are "plodders" whose duties are regulated by the clock. Their faithfulness, says Mr. Bok, is purely negative; if they detract nothing from business, they add nothing to it. An old philosopher defined a slave as one who carried out the ideas of another. If this is true, how many slaves there are in commercial life! Commercial education is necessary to relieve business of the monotony of its routine, to raise the business man above the machine. If one is to rise above the mechanical performance of his duties in business, it must be by a broader study and a more complete understanding of the processes of business. German training gives to the man who goes into trade a markedly different attitude than is given to him by Anglo-Saxon education. With us the business man finds his livelihood in business, his life is elsewhere; the German finds in business a means of life as well as of livelihood; he loves business and devotes himself unreservedly to it. Too frequently the American boy who goes into a business house, spends his hours there as a price he must pay for other hours he wishes to

[1] Education of employers is necessary. One can but express approval at a late statement of Andrew Carnegie that, if he had ever possessed any genius, it was in his ability to recognize genius in other men. We need employers who will discover and develop young men of talent, and not leave them to "rust away on a siding."

spend outside. It is not strange that such a one should "watch the clock." He labors for eleven months in order that he may have one month of holiday. Business needs men so equipped that they can surmount its mere details and get the broader view that is involved in its modern complex character. Clerkships have been too long and too frequently regarded solely as a means of existence. Places are often, as they long were with the East India Company, coveted by those who wish to be assured of a living and to have free time for other employment. A seat in the India House was a sort of pension, and many men famous in English letters worked there as clerks. John Stuart Mill, a detail clerk, regarded a clerkship as an occupation best suited to one who would undertake extended and laborious literary production, for, said he, it required a small expenditure of mental energy, and gave at once a means of subsistence and leisure.[1] Such a regard for business may, as in the case of John Stuart Mill, prove a gain to literature or to some branch of science, though it is at a loss of business efficiency, and in the vast majority of cases there are not the attending compensations. Charles Lamb, who also wrote in the intervals of "toil" at the East India House, charac-

[1] "I do not know any one of the occupations by which a subsistence can now be gained, more suitable than such as this to any one who, not being in independent circumstances, desires to devote a part of the twenty-four hours to intellectual pursuits. . . . For my own part, I have through life found official duties an actual rest from the other mental occupations which I have carried on simultaneously with them." — MILL, *Autobiography*, pp. 86, 87. New York, 1887.

terized his fellow-clerks as "A Collection of Animal Simples."

To have the largest measure of usefulness to business, one who goes into it should regard it as his life work, a worthy end in itself. "We sorely need," says Mr. Sadler, speaking for England, "that type of liberal education which is a natural avenue to a keen intellectual interest in modern commerce and industry." Special schools and special instruction give opportunity to emphasize the requirements of a commercial career and the fundamentals of success in it, as they cannot be emphasized in vague general education. The following illustrates what is meant: "I would wish to forewarn you against a fault unfortunately too common among young men commencing their careers. Many have what I will call the character of employee. They arrive in the morning at their work, do strictly what they are ordered, and await impatiently for what they call the hour of liberty in the evening. No measure of success attends these; they will remain employees all their lives. The employee who wishes to succeed is preoccupied unceasingly with the business intrusted to him; he regards it as his own, and finishes in the evening what he has been unable to do during the day. Such a man is sure of success, if he adds to these qualities habits of order and economy."[1]

Concerning business being a worthy career there should

[1] Director of the Superior School of Commerce, Paris, to students. Cited in Teegan, *Technical, Industrial, and Commercial Education in France*, pp. 137, 138.

be little question. Herbert Spencer, in his lucid analysis of the question "What knowledge is of most worth?" begins with that which insures the individual's immediate self-preservation. In regular order there follows knowledge that leads to the individual's continued preservation (through economic provision for future subsistence), to the discharge of parental duties, and to proper social and political conduct. All this knowledge is basal, for upon it depends the welfare and perpetuity of the individual, the family, the social and political order. After this fundamental knowledge comes that which seeks pleasure through the employment of leisure. It is patent without argument that in the equipment to make provision for social, family, and individual welfare, business education occupies an important place.

But many who actually face the problem of business employment feel that there are at present small opportunity and poor reward. Gigantic aggregations of capital, it is said, crush the individual. Two errors are fundamental to such judgments. A prominent business man writes of the present conditions: The business world is burdened with applications for positions from two classes, — those who have a smattering of practical knowledge with little capacity for growth, and those without a smattering of practical knowledge, yet having capacity and training for teaching, literature, and the bookish professions generally. Send us young men and young women with ability and capacity, he says, and we can advance them rapidly.

The corporation recognizes and recompenses ability. The opportunities for young men are as great as ever; the question is, are young men prepared to make the best use of their opportunities? With so complete a change as has taken place in the organization of commerce and industry, misunderstanding is natural; but let it not be forgotten that the individual is still all-supreme; and "organization has not lessened the play of purely personal qualities." Many forms of profit-sharing and piecework stimulate and reward modern workers. The schoolmasters need to take account anew of the demands to be made of those they train. What shall be said of the arraignment of clerks by a Chicago bank official? "I have known clerks to work for years in the same office within six feet of each other and know no more about each other's work than if they had never been within six miles of each other. The great majority are content to do their allotted duties by rote, — to do them exactly as their predecessors did, without thought, without suggestion of improvement, without understanding the principles which underlie their duties, or caring to know more than just enough to keep their job. How can you elevate such men? Nothing short of dynamite would do it."[1] Education needs to be so modified that such statements shall not continue to be made.

The present needs a broader, more catholic study of business, so that the facts with which it deals shall be spiritualized and be made to fructify in life. Study dignifies a business occupation. If any pretender might equip

[1] Forgan, *Grip and Grit.*

himself with two or three simple remedies, and begin the practice of physic, or put up his shingle and call clients in the law, it not only would do much harm directly, but the good repute of these honorable professions would suffer. The future business man should not have ding-donged at him, directly and indirectly, through school and college, the traditional idea that one group of occupations is liberal, sacred, honorable, and another narrow, profane, and, although necessary, to be regretted. Is it to be wondered at that one so trained, who aspires to the former in vain, should curse a fate that consigns him to the latter? Many branches of business, requiring extensive and exact knowledge, deserve to be called, in every sense of the words, liberal and learned professions. Let us insist that any necessary work is honorable, and that if an adequate preparation be made for it in advance and it be well done, it is liberalizing and liberal.

A study of business as a worthy career will create a love of and interest in it. The one who follows an occupation as a last resort, because there is nothing else for him to do, deserves commiseration. One should believe in his work, and love it; let his pity be for those who cannot enjoy the privileges and opportunities which he enjoys. A metropolitan clergyman recently said that business men ought to make millions of money as some compensation for their loss from not being in his profession. Such a statement is all right from the clergyman's standpoint; he but obeys the apostolic injunction of magnifying his calling. But we cannot accept this meas-

ure of the utility of business. The business man feeds, clothes, and shelters his fellows; without his coöperation, sorry indeed would be the results of the clergyman's labor.[1]

"Our energies and strength we give
That God's great family may live."[2]

One can but be struck with Elbert Hubbard's characterization of his master bookbinder in the world-

[1] "There are special reasons for misunderstanding on the part of teachers and professional men generally with regard to business. In the processes of business the financial aspect of each transaction is necessarily kept in the foreground, while the actual service to the community, for which payment is made, appears to be secondary. Under existing circumstances a teacher or a doctor is paid for his services no less (though possibly on a lesser scale) than the business man. But during the rendering of such service, all thought of payment has actually to be put aside, if the service itself is to be successful. Again, the professional man in his professional work has the constant opportunity, and frequently the desire, to give a portion of his services without reward, because his services are from man to man. In the case of the business man the relations between himself and the persons whom his work is ultimately destined to serve (*e.g.* those between a merchant in the home-trade and the users of the needles he supplies) are so remote that the opportunities for benevolence in the course of his business are necessarily fewer. No one would pretend that the average business man is less charitable than the professional man. But he is benevolent chiefly outside his business; the professional man is benevolent in the actual exercise of his profession. And hence not the business man but 'business' is often looked down upon from the 'high moral standpoint' as a morally inferior occupation by the professional classes, and, to speak plainly, by those in the teaching profession. It is also regarded as an intellectually inferior occupation by those unacquainted with the complexity of modern business and the administrative ability which it demands, but that point may be, for the moment, left aside; the misunderstanding with regard to the moral question is more serious because it does not, like the other, cure itself of necessity."— HARTOG, *Commercial Education in the United States*, p. 52.

[2] Kent, *To a Young Man on Entering Business.*

famous Roycrofter shop; he is "a silent man with a princely pride, who is sure that nobody but book-lovers will go to heaven." Such a one can teach raw country people to make beautiful books. No work is menial; a cobbler's task, if it be well done, will save life; when the amanuensis puts into his typewriting the best of himself by way of preparation and execution, his is a work of art; a trial balance teaches lessons of eternal truth. More rational education must correct the present too prevalent dissatisfaction with their lot, on the part of those who are in business, or who are to enter upon it. One should believe in his work, and, if so, he will do better work, and be happy in the doing of it.

"If I were a cobbler, it would be my pride
The best of all cobblers to be;
If I were a tinker, no tinker beside
Should mend an old kettle like me."

Two results will follow the formation of high ideals of business: the first is more faithfulness in business and intelligent devotion to it; and the second, a breadth of view coming from an enlarged conception of the importance of the occupation. A man does his best work in any line when he sinks self and works for a cause. One of McKinley's pastors said a favorite text of the martyred President was, "Not slothful in business, fervent in spirit." Scripture calls one who does his duty (and nothing more) "an unprofitable servant." Speaking of the old Roman custom, it says, if a man summon thee to go with him one mile, go twain. In our services we are required to give

full measure, packed down and running over, — in a good cause to be sure, but one should be satisfied that the cause is good and then the gift is to be without stint. "Self-ends in education are unworthy ends," and this ideal is true of the education for one who enters upon a commercial career. His calling needs more of the halo of service.[1]

Self-education and Continued Education. — The efforts of those who have entered upon commercial life to broaden their outlook and better their equipment is itself convincing testimony against the inadequacy of their original preparation. To take one of many examples, an elaborate scheme of instruction has been devised by the American Institute of Bank Clerks, and this has had the approval of the American Bankers' Association. The Correspondence School of Banking provided by the Institute arranges for instruction, termed "systematic and thorough," in some sixteen different departments. All branches of the banking business are considered in this scheme. The Institute and its School are the outcome of conditions under which it is claimed that "nearly every banker realizes deficiencies in his technical or general education." In banks as elsewhere "the clerks of

[1] "It would be a horrible result of commercial education if every one were taught that the highest end of life is to play selfishly for your own hand. The probable outcome would be, first, a cruel outbreak of physical violence, and secondly, pessimism. The true man of business knows that it is not impossible to serve his nation and his colleagues, while at the same time in due measure furthering his individual interest." — SADLER, *The King's Weigh House Lectures to Business Men*, p. 37.

to-day become the officers of to-morrow," and this is of pressing moment to both officers and clerks, and both are seeking to remedy present conditions.[1]

But the one who postpones the special preparation for his life work, until that work has begun, is under a heavy handicap. In addition to the severe exaction of trying to make up for lack of preliminary preparation, he is in danger of finding himself distanced by those with a long lead. The best success will come from the right quality and temper of mind and the attitude of one toward his work. The first desideratum is: special preliminary education; nothing can completely make up for loss of this. Following this there should be continued study. Most unfortunate he who feels that ever, in any occupation, his pupilage is at an end. Not desultory reading, not aimless study as diversion, but serious, well-directed effort along the line of one's work; this it is that makes him perform better present work, and that gives the equipment for still higher service in the future.[2] One

[1] See recent reports of American Bankers' Association.

[2] "Self-help in education is an indispensable thing; but not less indispensable is the help which we get from those who know our business better than we do, or who know different aspects of it, or know it from a different point of view. Commercial education ought to be intertwined with a man's practical business career. A man who is actively engaged in business ought never to be 'above' attending some class or course of lectures from which he can learn something to improve his efficiency, or to deepen and extend his knowledge of his calling. A young man who enters a business house at fifteen or sixteen ought to regard it as absolutely essential for him to carry on his education by attendance at evening classes. It would be well if firms made a much more general practice of encouraging their younger employees to attend

must first be master of his own occupation. Success awaits the man who treats his business as a science, and follows it as a devotee. The business man must believe in his work as well as himself. Let him get a touch of inspiration from a study of the lives of great merchants, and see how in his particular business he, too, can be useful.

The preceding is, however, only a part of the truth. In addition to devoting himself to his vocation the business man needs an avocation. How lamentable that one should be a doctor, a lawyer, a teacher, or a business man, and nothing more. Emerson, in his essay on Spiritual Laws, calls attention to the too common experience where "the man fits himself as well as he can to the customary details of that work or trade he falls into, and tends it as a dog turns a spit. Then is he part of the machine he moves; the man is lost."[1] Of

classes in the evenings, and even occasionally in the afternoons." — SADLER, *The King's Weigh House Lectures to Business Men*, p. 28.

[1] See Vanderlip, "The Business Man's Reading," *Saturday Evening Post*, February 25, 1902.

"But many Americans admittedly overdo their devotion to business affairs. They sterilize part of their nature by too great absorption in the excitement and struggles of commercial life. In the northern parts of the United States there is too little of what the writer of the book Wisdom called the 'diligence of idleness.'

"Robert Louis Stevenson wisely said that 'perpetual devotion to what a man calls his business is only to be sustained by perpetual neglect of many other things. And it is by no means certain that a man's business is the most important thing he has to do.'" — MICHAEL E. SADLER, "Impressions of American Education," *Educational Review*, March, 1903.

too many, alas! can it be truthfully said, as was said on a French tombstone, "He was born a man and died a grocer." With narrow specialization there should be coupled much of general interest; life is more than meat. Devotion to the vocation is necessary to any form of success; but there is a higher and better kind of success awaiting him who has, in addition, breadth of view. In commercial affairs let the business man "be progressive without being a faddist, well informed without being a pedant, strong in his opinions without being an egotist, and enthusiastic without being an enthusiast."

Business Ethics.—Wherever schools of commerce are established, whatever their local problems, their supreme aim should be the production of those who have the ballast of integrity of purpose, whose ships of life shall be ever on the even keels of strict morality. In the former sections the discussion was on business as an intellectual pursuit, but "it will be perilous if it does not remain moral." More than a hundred years ago the world was startled with the declaration that in international trade both sides might be gainers. We recognize this as true for nations, but hardly so for individuals. Gain is somehow popularly regarded as illicit; if one party to a transaction has a profit, it is felt that the other must necessarily have a corresponding loss. Business men too often act as though their success depended upon some form of sharp dealing, discrediting their competitors, or gaining an advantage in an underhand way. "A thing is business," they say, as though this were con-

clusive. Be it said again, business is a social service. The best protection against business dishonesty is for the business man to know how to secure an honest gain. The one who foresees a great need, who furnishes and cheapens commodities which prolong the duration and increase the pleasures of life, shall not such a one receive in this world's goods a hundred fold?

Business men, then, need a training which will enable them to see in their occupation much more than the giving or taking advantage. As their service is great, so they may expect large returns. The proper attitude will come neither from instinct nor custom. Charles the Great, in the capitulatory directing the foundation of schools, pertinently said, "Right action is better than knowledge; but in order to do what is right we must know what is right." Business needs a code of professional ethics; too often its followers feel that if they escape judgment in court, they are justified. But outside the letter of the law there should be standards of conduct so well recognized that deviation from them will be branded "commercial malpractice." It will readily be seen that such a code would have a double relation: to the public that is to be served, and to one's competitors or associates. Systematic instruction for business men should include a broad treatment of the laws of business, showing that in the last analysis law rests upon custom innate to which is the notion of right. Some professions have their code reduced to formal statement, and give instruction upon it. True education, says John Ruskin,

should make people not only do right things, but enjoy the doing of them; "not merely industrious, but to love industry; not merely learned, but to love knowledge; not merely pure, but to love purity; not merely just, but to hunger and thirst after justice." Training for business should not stop short of this ideal.[1]

The trained man will be more efficient, he will be less subject to the temptation of trickery, and he will be above maligning his competitor. Professional competition is as sharp in medicine and law as is business competition; yet aside from legal regulation these professions have through training a criterion of professional etiquette that means much for dignity and advancement.

[1] "It is physically impossible for a well-educated, intellectual, or brave man to make money the chief object of his thoughts; as physically impossible as it is for him to make his dinner the principal object of them. All healthy people like their dinners, but their dinners are not the main objects of their lives. So all healthy-minded people like making money — ought to like it, and to enjoy the sensation of winning it; but the main object of their life is not money; it is something better than money. A good soldier, for instance, mainly wishes to do his fighting well. He is glad of his pay — very properly so, and justly grumbles when you keep him without it — still, his main notion of life is to win battles, not to be paid for winning them. So of clergymen." — RUSKIN, *Crown of Wild Olive.*

"Why young men should be allowed to admire in business what they are taught to despise in athletics is not clear. It is of vast importance to the future manhood of this country that scorn of unfairness should be universal. Above all, let it be applied strenuously to unfairness in business. We are a commercial people. Our boys must go into commerce. Our professions are so mingled with commerce that it is often hard to distinguish if they be professions. If we are to wink at unscrupulousness in commerce, then we are doomed to become a race of tricksters and manhood is dead within us." — *McClure's Magazine*, "Editorial Announcement," November, 1903.

Standards of honesty ought to be established as is done in the European schools, where honor and integrity in commercial life are made the requirements for success. Such instruction as this is not only possible, but it is unsafe for one to go into business without it. As set forth by Bishop Huet, to a merchant nothing should be more religious than his promise, nothing more sacred than his word. It is a fact, that many persons of perfectly good intentions are not reliable in keeping promises and can neither trust themselves nor be trusted by others. The merchant of all others needs the lessons of promptness and reliability, — lessons which schools of commerce can give. This requirement is wider than for one's individual career. "Common honesty is as needful in kingdoms and commonwealths that depend on trade as discipline is in an army; and where there is want of it from thence trade shall depart. As the honor, honesty, riches, and strength of the nations are, so will be their trade. These are the five sisters that go hand-in-hand, and must not be separated." [1]

The complexity of commercial operations at present, the wide separation of dealers from the final consumers with the possible sinking of identity, new ways of deception, the application of science in adulteration — all these tend to offer more special temptations than formerly. It is a cause for satisfaction that the morality of the

[1] Yarranton, *England's Improvement*, etc. (1677), p. 6. This remarkable book has lately been termed "the first cry for technical education in Great Britain."

commercial world is so high. Honesty is not "old-fashioned"; selfishness and greed are not the ruling motives of business.[1] The following is a statement of the case by a Chicago banker: "Character is more important than position. A man is poor indeed who gains wealth at the expense of his own self-respect. A man is rich, whatever else he lacks, if he possesses nobility of character. Better to die a pauper in purse than a pauper in soul. Better fail to get money than allow money to get you. To reach old age possessed only of money and a desire to increase it is not success in life. It is a sad and terrible failure."[2]

The ideal above set forth should be instilled into the

[1] "The best general test of our commercial morality is in the fact that, while there are in business life billions of bargains based say on samples, there is but an infinitesimal amount of litigation arising from such transactions and from non-correspondence of the sample and the bulk." — ROLLIT, *Chambers of Commerce and their Functions.*

The Business World reports the experience of a Western minister who sent the following questions to representative business men of his town: (1) Is it possible in these days to attain large business success and maintain a high standard of personal integrity? (2) Is the "Golden Rule" practicable in business? (3) Is it observed by business houses? Thirty replies were received, and of these twenty-seven answered all three questions in the affirmative. One was characterized as "anonymous and equivocal," and two as "doubting and despairing."

[2] Forgan, *Grip and Grit;* see also Robert C. Ogden, *Sunday-School Times*, February 23, 1901.

"Let thy high manhood sacred be,
Then lift thy calling up to thee.
Be true thyself and thou shalt find
An answering echo in thy kind.
Keep thou thy faith with men, and see
How men will keep their faith with thee."

— HENRY S. KENT, *To a Youth on Entering Business.*

minds of business men-to-be, both for the good of business and the success and happiness of those who follow it. To quote another banker: "The lad who enters West Point is no braver than his fellows; but years of constant teaching that personal honor is all important and that its highest expression is unfaltering courage and unswerving fidelity to duty, instills into his being a quality which makes him a braver man in the face of danger, and one more certain to carry out his orders without counting the cost to himself. So, I am satisfied, men educated in colleges of commerce would have greater strength to resist temptations which so often lead to ruin and disgrace." (McMichael before American Bankers' Association.)

Crooked dealing is the precursor of failure, for it destroys that confidence which is the mainstay of commercial life. Francis C. Moore, on retiring from the presidency of one of the large fire insurance companies in New York City, advised a company of young men looking to business careers, to be strictly honest from policy, even if they could not be so from inclination. The root idea of customer is in *custom*, and a customer is one who patronizes from habit. Customers can be kept only by fair dealing. If we seek for the causes of business fraud and deception, they are most largely improper ideals and incompetency in carrying even good ideals into effect. Mr. Forgan constructs a business man's platform out of ten planks: To be honest, making money honestly or not at all; to be fair, refusing to injure a competitor; to be just,

remembering that all must live; to be kind, regarding employees as something more than an investment; to be charitable, giving liberally for the upraising of humanity; to be healthy, exercising as a duty; to be sociable, having a side to friends not known to all; to be lovable, being more to family than a means of support; to be sympathetic, fearing littleness of soul more than littleness of fortune; to be broad, accumulating resources higher than the material; above all, to be true to one's self, condoning nothing in self which is to be condemned in others.[1] If such ideals were held before young men who are to go into business, and if at the same time there were furnished through instruction the capacity to realize these, a new commercial era would open.

Value of Preliminary Training generally Recognized. — Work in almost all lines is at present done by men who have in advance been trained to do it. The apprentice

[1] *Grip and Grit.* "The country," writes one in the *Outlook*, "is full of men who are overworking, not because they care for money, but because they want to command the most comfortable conditions for their families, who, if they were told that they were shortening their lives ten years, would not hesitate to go on, accepting the sacrifice as part of their duty, and an opportunity to be welcomed rather than be avoided. Those who know American men well know that there is a deep vein of idealism in the great majority of them, in their attitude toward their families. It is here that they spend themselves lavishly; it is here that many give their lives without hesitation. But the American father does not always give wisely. The tragedy lies in the substitution in the family life of the material for the spiritual things, and for that exchange many men are unconsciously responsible. They are so eager to furnish comfort for their families that they forget to give life; they are so willing to surrender their strength and their time for those they love that they forget to share themselves."

system went out of existence when the demand was strongest for skilled laborers, and this demand has been and is to be supplied by education.[1] The old system of training craftsmen would be impossible under modern conditions; the training of the school now takes the place of the training of the master. Time was that one who would learn medicine associated himself with a practising physician and learned by observation and experience, but a practitioner so trained in these days would be discredited as a quack. Medicine as an art must be preceded by medicine as a science. Method of training for the law likewise has changed. The would-be lawyer does not depend upon the study and experience of a law office. The civil engineer does not learn to survey by carrying a surveyor's chain, nor the mechanical engineer to build bridges by serving as a common laborer. Excepting commercial pursuits, in all branches of society's work, special preliminary training is now generally demanded.

The matter of accounts calls for special consideration. As accountancy has become a profession, it has served to show business men's limitations. A practising accountant reports that few men are able to make a statement of their business, and that it is no uncommon thing to find that they cannot intelligently interpret a business statement when it is made. Such men are adrift without a rudder, and are

[1] Felkin, *Technical Education*, etc., p. 30. See also Howell in *Contemporary Review*, 1876. The first of the Factory Acts in England (1802) pertained to education. It regulated the labor of children in factories and required that they be taught reading, writing, and arithmetic for a part of each day.

always in imminent danger of catastrophe.[1] True, business cannot be reduced to so exact a system of knowledge as can medicine, law, or theology; but because a complete and systematic science of business cannot be established, can we safely leave the whole subject to haphazard knowledge gained through experience? Here, as elsewhere, training by experience is too costly.

Business men should have another school back of experience. To make a comparison, as the science of medicine has become complex, years of study have been increased in number and lengthened in duration. When cupping and caustic were the sum of medical practice, preparation was an easy matter. Even now with increased years, clinics, laboratories, and special cases, the new-fledged physician feels that he ought to associate himself with an experienced practitioner, rely upon a consultant, or gain experience in hospital service where he can defer to the judgment of a chief. Again, in medicine, this is an age of specialists. After a general course the physician takes some

[1] The inspector-general of bankruptcy of Great Britain reports the absence of proper books in about seventy per cent of the cases where bankrupts have applied for a discharge. This matter has been considered so important in Cape Colony that a statute has been enacted as follows: —

"Any insolvent who shall not have kept or caused to be kept such reasonable and proper books or accounts containing all such entries belonging to and exhibiting the nature of his dealings and transactions as (regard being had to his particular trade or calling) might reasonably be expected and required shall upon conviction be imprisoned with or without hard labor for any period not exceeding six months." A report from Cape Colony is to the effect that this enactment is made operative by the courts. — MARTIN, *Bookkeeping and its Relation to Commerce*, pp. 122–125.

branch of the science and devotes himself to its study and practice, but the broad general knowledge is necessary if he is to be successful in his specialty. So in business, wide general knowledge is necessary. The business man should know the anatomy as well as the physiology of industrial society; he should be quick to detect symptoms, pronounce diagnoses, prescribe remedies. Only when we have business recognized in systems of instruction, and the business man giving himself special preparation, shall we have this occupation assuming its true place, a healthier state of mind among business men themselves, and a more efficient business man. "Instruction must always be educative, and just as one inculcates patriotism in a soldier, humanity in a physician, self-denial in the missionary, the cultivation of science in the scholar, devotion and culture in the teacher, love of beauty in the artist — in exactly the same way the aptitude for commercial affairs, a desire for work, the love of order and economy, the spirit of enterprise, clearness of judgment, and probity — qualities which make a good business man — can be taught in schools of commerce."[1]

[1] James, *Education of Business Men in Europe*, p. 139.

"A man has to learn a good deal of business, as a soldier has to learn a good deal of soldiering, *under fire*, and what in business corresponds to being under fire in the field is feeling yourself exposed to the real risks and to the unexpected and unprepared emergencies of real trading. You can't artificially reproduce in a commercial school the conditions of real business. It is like imagining yourself to have the toothache — quite a different thing from the reality. But just as the soldier needs some professional training before he goes out on service, so the future man of business needs some professional training before he enters practical business life." — SADLER, *The King's Weigh House Lectures*, p. 28.

CHAPTER III

Commercial Education in Germany and Austria

I. Germany

Commercial Education in Germany. — Saxony has well been termed the classic land for furnishing special instruction to the merchant class. Not in Saxony alone, but in other divisions of the Empire, mercantile schools have long constituted an important division in the systems of education. Commercial schools of all grades are widely distributed in Germany and are of marked influence. Some English and American writers have resented attempts to study German commercial education on the ground that it would "Germanize" the schools of their countries. In the study of a foreign system of education certain principles may guide; one should not study to imitate slavishly. "The first thing we need to learn from a careful comparative study of foreign schools," says Fabian Ware, "is that each nation must build up the educational system best suited to its own requirements and best adapted to the national genius of its people."[1] German education, commercial and otherwise, is far from perfection; the system of commercial education may well be charged with "the

[1] *Educational Foundations*, etc., p. 56.

defects of its virtues"; those trained in it are well disciplined, but they are mechanical, and sadly lacking in the individuality and initiative so characteristic of those trained in the schools of England and America. Yet the German has a thoroughness and a persistence that his Anglo-Saxon brothers may well imitate. Rather than cavil at German education we should strive to profit by its many admirable features, and this without the sacrifice of the essentials in our own educational system.[1]

Germany has long served as a notable illustration of how material prosperity and political power follow directly upon the stimulation of education. The address of Frederick William after the battle of Jena has become classic. "The state must regain by intellectual power what she has lost in material power, and to this end I desire that everything may be done to extend and perfect the education of the people." From 1806 down, German education, with the universities as the crowning glory, has been rehabilitating an Empire. Since 1870 we can see how great has been the accomplishment; but, be it remembered, it is a triumph of mind and hand that have been at school. Testimony similar to the following might be furnished at great length: "Ten years' residence and study in Germany has led me to the belief that this great Empire's greatest capital is its intelligence. A process

[1] "Of all species of extravagant waste, there is none more unpardonable than that which permits one nation to remain in ignorance of the clever and successful methods devised in another for gaining important ends." — New York *Nation*, August 31, 1899, p. 174.

of rigid training has not only enabled Germany to overcome the disadvantages of her geographical position, but the merchants and manufacturers of England find themselves face to face with the fact that German commerce has much more rapidly increased than their own, and that many markets in different parts of the world are being lost to their German competitors."[1]

German education is to be credited for a sort of professional attitude toward industrial and commercial occupations. The old phrase *the rights of man* is being rendered *the rights of commerce.* A recent magazine writer declared that the only thing which has not advanced in Germany since 1848 is political liberty. The suggestion is offered that a suitable inscription to represent the spirit of modern Germany would be "Make Way for Trade."[2] But attention need only be called to the fact that Germany has secured this remarkable interest and efficiency in trade without the sacrifice of other ends. Her scholars have been the foremost in classical studies, in philology, in theology, in philosophy, ethics and psychology, in history, and in other departments of scholarship. It will be of interest to note the relation of commercial schools to the general system of education in Germany.

General Education and Commercial Education. — In 1866 Matthew Arnold referred to the German school system as a thing to "excite the foreigner's admiration." For forty years foreign students have studied every type of

[1] Harris, *United States Consular Report,* January, 1904.

[2] Countess von Krockow, in the *Independent,* January 3, 1901.

German schools with profit. One thing that has been borne in on these students is that German education is a *system*, all parts of which are contributing to the development of German character. There is, too, what was described by a staff correspondent of the London *Times* as a "spontaneous tendency" for all parts of German education to unite in the formation of the system (*Times*, September 26, 1901). It would be a mistake to cut off commercial schools for purposes of study. By the government recognition and supervision through the privilege to grant a certificate for one-year military service, commercial schools are stimulated on the academic side. Educational opinion in Germany favors general training as much or more than it favors technical instruction. Languages and science are emphasized in the commercial schools so that "aptitude" for business has been secured from secondary education.[1] Too early specialization is not only discouraged, but is practically prohibited.

Fabian Ware credits German Realschulen and Ober-Realschulen with "the educational foundations of Germany's past commercial success." The same writer makes the more sweeping statement that Germany has less of special education than has France, England, or the United States.[2] German commercial success is due quite as

[1] Sadler, *Problems in Prussian Secondary Education*, p. 169.

[2] *Educational Foundations of Trade and Industry*, pp. 144 and 287. Quite in the same line is a statement of Sir Philip Magnus: "It is not only — nor, indeed, principally — because Germany possesses numerous schools of commerce that she sends forth hosts of well-trained young men to occupy the

much to sound modern education as to technical instruction on commercial subjects. The preceding statement is made with due regard for the influence of commercial schools, and it does not belittle these schools or minimize the results from them.

Improvements in the modern schools of Germany date from 1859, when the Prussian government assumed control over the Realschulen and issued official courses of study for them. From this on there has been a gradual reorganization of secondary and higher education. The tendency has been in the direction of modernizing the higher schools and the universities. Important changes were made in Prussia by the *Lehrplan* promulgated in 1892. Further changes, such as reduction of time given to Greek and Latin, giving more freedom of choice, in the substitution of modern languages for some of the classics, were made by the new program of work issued in 1900.[1] The whole spirit of the later changes seems to have been expressed by the Emperor, that it should be the purpose of all education to produce good Germans, not good Greeks or good Romans. Among the most notable recent changes in German education is the addition of

best posts in foreign commercial houses, and to establish trading stations in all parts of the globe. It is mainly because her system of secondary education is adapted to the wants of the people. Her sons are trained to observe and to think, and what they learn they can utilize in after life. This is not so with us. What we most want are good higher elementary or middle trade schools, and a systematic organization of our secondary education." — *Industrial Education.*

[1] Wright, "Abolition of Compulsory Greek in Germany," *Educational Review*, June, 1902.

commercial courses to some of the traditional higher schools.[1] Thus, while separate commercial schools and departments are being multiplied in Germany, general education is also being so modified that it is of increasing service to commerce. The latter phase of the question is dwelt upon because there seems in some quarters an overrating of the importance of commercial education as distinct from a general education modern in character.

Continuation Commercial Schools. — Lower or primary commercial schools (*Kaufmännische Fortbildungsschulen*) are for the continuation of the education of those who withdraw from school at about fourteen, and for the extension of mercantile knowledge; these are also called schools for apprentices. In these schools the instruction is limited, on an average, to ten hours a week, and it is designed for those who are engaged during the day, so that classes are held in the morning or evening. These schools are sometimes independent, and sometimes connected with other commercial schools. The first fact to be noted in accounting for them is that attendance upon their sessions is compulsory. In Saxony the attendance is required for three years; in Prussia, until the apprentice is eighteen. In enforcing the compulsory feature the law deals directly with the employer. If he does not secure the attendance of his apprentice, he is fined. Some of these schools charge tuition, though in most cases they are supported by the city authorities or chambers of commerce, and tuition is free. The continuation school connected with

[1] Hooper and Graham, *Commercial Education*, etc., p. 82.

the Middle Commercial School at Leipzig charges a fee of twenty dollars per year per pupil. Where a tuition fee is charged it is the rule for the employer to pay it.

There are advantages and disadvantages in the compulsory attendance feature. Mr. J. Montgomery, of the Liverpool School of Commerce, who taught in one of these continuation schools, reports that students often came from long distances, fatigued from the excessive strain of their work and school attendance. He felt that it was impossible for some of the students to make any progress, and many others showed slight interest. This English instructor had not the heart to waken some of these boys when they dozed in his classroom; but one can hardly think that the German instructors are so considerate. These schools are part of a system that develops the plodding, dogged German characteristic; they contribute their part toward securing the *Brodwissenschaft* attitude toward the world.

As may be expected, there are hundreds of these schools distributed throughout the German Empire. Their range of studies includes, at Leipzig for instance, German, English, and French, commercial arithmetic, study of commerce, bookkeeping and correspondence, geography, and penmanship. The total of ten hours a week for three years is distributed among these subjects.[1]

Middle Schools of Commerce. — The "school of com-

[1] For a further discussion of this curriculum see "Die Allgemeinbildung in Kauffmännischen Fortbildungsschulen," by Dr. Adler, in the *Zeitschrift für das Gesamte Kauffmännische Unterrichtswesen*, February, 1904.

merce par excellence" in Germany is the so-called middle or high school, which takes students at about fourteen or fifteen and continues them for three years. These are between the continuation school on the one hand and the higher school of commerce on the other. Such schools are comparatively independent of the system of secondary education; they are usually under private control and are supported in part by students' fees, in part by subsidies from states and cities, and in part by contributions from merchants' associations. There are reported to be about two hundred of these schools in the German Empire.[1] There are differences in the plans of organization; some are conducted on a separate establishment, as at Leipzig, Dresden, and Chemnitz, while some are annexed to other technical schools, as at Munich and Frankfort-on-the-Main.

The middle schools give a rounding-out to the education of those who are to enter mercantile life. Though they get students some years later than do the Realschulen, they correspond to the latter in a general way. One direct advantage from these schools is that their diploma enables a youth to conclude his apprenticeship in two years instead of three. Those who have the diploma of the middle schools, and have completed the terms of their apprenticeship, are also eligible for admission into the higher schools of commerce.

A mercantile school of the middle class was opened at Chemnitz in 1848. Until 1879 it was conducted in an

[1] Heinig, *School Review*, February, 1902.

old house, rented and adapted for school purposes. In the latter year the number of students had so increased and the usefulness of the school was so apparent that an appeal was made for support. Stock was subscribed for a fund that went into a site, building, and equipment. This school has two divisions of pupils: those who are employed and are continuing their studies, and those giving their whole time to study.

The school at Leipzig (*Oeffentliche Handelslehranstalt*) is fairly typical. In addition to being the oldest of its class it has been a center for all of the kinds of commercial education given in Germany. Formerly other types of commercial schools looked to Leipzig for a model, as the higher schools of commerce have done more recently. This institution was founded in 1830 by the Trade Schools Guild; it was taken under the general supervision of the Chamber of Commerce in 1888. Besides the continuation school work noted above and the work of the higher school of commerce to be noted below, this school has two lines of work. One is a special course (*Fach Kursus*) and the other a general course. The first is for one year (though two years are given to the same course at Dresden), and it is a finishing course to those who have been through the general high schools and who wish technical commercial instruction before going into business. There are only about fifty students in this course in the Leipzig School. The three years' course is more general and attracts a much larger number of students. Its subjects of study are given in the following table: —

	First Year	Second Year	Third Year
Required			
German	4	3	3
English Language and Correspondence	5	4	5
French Language and Correspondence	5	4	5
Mathematics	3	3	4
Mercantile Arithmetic	5	3	2
Physics	2	2	—
Technology	—	—	2
Chemistry	—	2	2
Materials of Commerce (*Warenkunde*)	—	—	1
General and Commercial Geography	2	2	2
General and Commercial History	2	2	2
Commercial Information, Laws of Commerce and Exchange	—	2	1
Office Work, Correspondence, and Bookkeeping	—	3	3
Economics	—	—	2
Penmanship	2	2	—
Shorthand	2	1	1
Gymnastics	2	2	2
Electives			
Italian	—	2	2
Spanish	—	—	2

— *Satzungen für die Oeffentliche Handelslehranstalt zu Leipzig.*

The *Handelslehranstalt* of Leipzig also illustrates the several methods of support. There are four sources from which its income is derived: students' fees, income on original endowment, subsidy by the government, and subscriptions to meet any deficit. Government support is from the city of Leipzig and the kingdom of Saxony; supplementary subscriptions are made by the Leipzig Chamber of Commerce. The total running expenses of the school are about $35,000 per year, of which from $20,000 to

$25,000 are met from the students' fees. The attendance in the school approximates 800 per year.

Dr. Adler, of the Leipzig Middle School, has made the following excellent statement of the aims of schools of this class: —

"Regarding the spirit and aims of the instruction given in German mercantile schools one fact requires attention. In most cases the general education of the pupils on entering these schools cannot be looked upon as complete, consequently much time must be devoted to general culture as well as to technical subjects. The result is that the schools aim at effecting two objects simultaneously, viz., to complete the general education of their scholars, and to give them technical knowledge useful in their future calling. Training the pupils to acquire a certain mechanical routine of doing business holds but a subordinate place in the lessons on mercantile subjects given in good educational institutions: on the contrary, care is taken that they shall obtain an insight, as they ought to do, into their future calling, and to inspirit them to independent thought and action. It is not intended that the immediate usefulness of the school shall consist in taking the place of practical business work, but in making that practical work more intelligible and filling these pupils with its spirit. The experience gained by practical work in a good mercantile house is as necessary now as it ever was, nay, for the young business man at the present day it is indispensable; so that those are greatly in error who think it is the duty of mercantile schools to become a substitute for practical training, and to turn out finished men of business who may at once set up on their own account. They have a wrong conception not only of what is the duty of such a school, but (and this is more important) of the nature of commerce and the needs of the commercial classes. For these reasons the first qualification required of teachers of mercantile sciences is that they shall have received a scientific education and have been trained in the art of teaching; they must also have gone through the school of actual business and always be posted in the latest developments and ideas of the commercial world."[1]

[1] Cited in Blackie, *Commercial Education*, pp. 26–27.

Leipzig Higher School of Commerce. — The most interesting recent commercial education experiment in Germany is the Leipzig *Handelshochschule*, inaugurated in April, 1898. For years there had been opposition to the establishment of higher schools of commerce, on the ground that they would increase the influence of the industrial classes, and so strengthen the power of socialism; but of late the need of higher commercial education has been so keenly felt that this prejudice could no longer prevent the establishment of commercial schools of university grade. In June, 1897, the Second Congress of Commercial Education met in Leipzig, and the question of higher schools was discussed at length. As a means of getting a basis for discussion, a large number of letters were addressed to leading merchants, tradesmen, merchant unions, *Handelsschule* men, professors in universities, and others. More than 300 replies were received, of which 250 were in support of the proposal for a higher commercial school. The Leipzig Chamber of Commerce, with some support from the Saxon government, assumed the responsibility for the School, and it was inaugurated. Eleven men constitute a senate of control, acting under a more general supervision of the Saxon Home Office. The senate is made up as follows: one member of the Saxon government, and one of the municipality of Leipzig, the president and two other members of the Chamber of Commerce, three professors of the University of Leipzig, two teachers of the Public Middle Commercial School, and a director of studies.

The Leipzig higher school has two objects: first, to give advanced training to those who are to go into commercial life; and second, to furnish a supply of properly prepared teachers to the commercial schools of lower grade. Those in attendance are of two classes, — students regularly enrolled for work, and those who are in attendance upon lectures as auditors. The latter are lecture-visitors, permitted to attend under certain regulations. Such attendance is encouraged by offering certificates for it. There are no entrance examinations for admission, but the conditions imposed are intended to make the entrance difficult and keep up the standard of the School. The following is the list of persons who may be admitted: first, those who have obtained the privilege of one year's military service and in addition completed their three years' term as apprentices in some mercantile establishment; second, those who have had nine years in the higher schools (*Gymnasien*, *Realgymnasien*, and *Oberrealschulen*); third, teachers who have been at German teachers' seminaries, and who have passed the second examination there; or fourth, foreigners who have a preparation that is equivalent to the above, and who are twenty years of age. In terms of American education this preparation would approximate the completion of a college course.

Instruction in the *Hochschule* is by lectures and practical teaching. The following are among the courses of lectures announced: theoretical and practical political economy, including finance; substances of goods and

technology; commercial geography; economic and commercial history; general law, commercial law, law of bankruptcy, laws relating to industry and insurance, and international law; colonial policy; and lectures for teachers of commercial subjects. In addition to these courses there are other lectures on a variety of subjects open to the students of the *Hochschule* in the Leipzig University. In the earlier period of the School's history the lectures were given in Leipzig University by the professors of that institution. Supervision over the lectures is exercised by requiring that an outline of each course be worked out and submitted to the senate for approval before the lectures are delivered.

Under the head of practical teaching, the following courses are given: commercial and statistical calculations; bookkeeping; German commercial correspondence and other office work; laboratory work in physics and chemistry; French and English commercial correspondence; Italian, Spanish, and Russian languages; and shorthand and typewriter practice. In addition to the foregoing liberal provision for language study, other languages are announced to be given if the demand for them arises. The subjects of the second group are given through the recitation or laboratory method, and the instruction is mainly by the teachers of the Middle Commercial School. Down to the autumn of 1902 this instruction was given in the building of the Middle School. The Higher School of Commerce thus rested "with one foot on the University and the other on the Middle School."

The plan of organization above described explains how it was possible to found the School with so slight outlay, and to carry it on for the first four years practically on students' fees. Teachers in the Middle School and professors in the University gave instruction for the tuition, which amounted to about nineteen thousand marks per year.

The *Handelshochschule* entered upon a new period of its history in October of 1902, when it occupied a building of its own, located on *Schulstrasse*, Leipzig. The increase in students had been so great that it became quite impossible to accommodate them by the plan of organization and the accommodations as above described. Under the new conditions the instruction is still largely given by the professors of the University and the teachers of the Middle School. From an attendance of ninety-seven during the first semester of the School's work, the numbers had reached to more than four hundred in the winter of 1903. A goodly number of the students are foreigners; with regard to occupation the merchant class predominate. The examination for the commercial diploma is offered to regular matriculates at the end of two years' work. This examination is both written and oral; the subjects in which it is given are about the same as those mentioned below for the teachers' diploma. Candidates for the latter, however, are required to satisfy additional requirements. The senate in control of the School announces that it reserves the right to add commercial correspondence in two foreign languages to

the present requirements for the commercial diploma. Full control of the examinations is in the hands of a board, appointed by the Saxon Minister of the Interior. This board is chosen from the professors at Leipzig University and the teachers in the *Handelslehranstalt;* it is made up of a president, with four representatives of theoretical subjects, and three of the practical.

A seminary for candidates for commercial teacherships is offered, open to persons of the following classes: first, students of Leipzig University and others of equal educational preparation; second, teachers who have passed the examination in seminaries; third, persons who have obtained the privilege of one year's military service, and having been in business, may wish to become teachers of commercial subjects. Candidates for the teachers' diploma are required to give before the senate of the School a practical demonstration of their ability to teach. The subjects in which the candidates are examined for the teachers' diploma are political economy, finance, the history of commerce, economic geography, bookkeeping, higher commercial calculation, correspondence and office work, and the laws of commerce and exchange. Candidates are not eligible for this examination until they have prepared an elaborate essay on some subject connected with the instruction in the School. The final tests are of two sorts, — a series of written examinations in private and a public oral examination. The authorities reserve the right to refuse the candidate advancement at any stage of his progress. In the winter semester of 1903

there were seven candidates for the teachers' diploma. Of these six were successful and one withdrew from the examinations. Two of the candidates were foreigners.

This School is closely articulated with Leipzig University. Students from the *Handelshochschule* are admitted to courses at the University, and University matriculates are similarly admitted at the *Handelshochschule*. In the Leipzig School, as in all the German universities, attendance upon exercises is voluntary, and one fear early expressed was that students would not show sufficient earnestness. The reports upon the students' industry are very favorable, however; they attend faithfully to work and make good use of the libraries of the University and the Chamber of Commerce, etc. Excursions are arranged to various industrial and commercial centers in Saxony. On these excursions students have been entertained by manufacturers and merchants, thus indicating the coöperation of practical men in the great work being done by the School.

Higher School of Commerce at Cologne. — The Municipal Higher Commercial School at Cologne was opened in May, 1901. It was the first of the commercial higher institutions in Germany to be established on its own foundation and with a separate building. Mr. Sadler remarks that the authorities of this School seem to have prided themselves a little too "jubilantly" on being first; but they have made remarkable advance in showing what a city school of commerce may become.

The Cologne School resulted from the gifts of a mer-

MIDDLE COMMERCIAL SCHOOL, LEIPZIG.

CITY SCHOOL OF COMMERCE, COLOGNE.

chant of the city (Gustav von Mevissen). The first gift, made in 1879, was put upon interest and increased until the death of the donor in 1899, at which time an additional bequest was made. When the endowment had increased to nearly $200,000 the City Council voted an additional $65,000, and also assumed financial responsibility for starting the School. They made a small annual appropriation for the running expenses, and gave $2500 a year for five years to establish a commercial museum. The committee of control includes the Mayor of the city or his representative as chairman, one member appointed by the Prussian Minister of Trade and Industry acting in conjunction with the Minister of Public Instruction, the director of studies in the School, three members of the City Council, three members of the teaching staff, two members of the Chamber of Commerce, and one representative named by the widow of the founder. It is worthy of note that teachers in commercial schools in Germany are duly recognized by being placed on the boards of control for their schools. Indeed, these German boards of control seem most admirably made up.

The School at Cologne has been popular from the start. Its attendance in 1903 exceeded fifteen hundred, and it bids fair to be of increasing interest and value. Its plan of studies is more definite than is the rule with German higher schools (see p. 325). In carrying the studies into effect, however, the management reserves the right of modifying and interpreting as may seem wise. The requirements for admission are practically the same

as at the similar school at Leipzig. The School at Cologne has already agreed to accept one year's work from the *Handelshochschule* in Leipzig; a year from other higher schools and universities may also be accepted, but the right is reserved of refusing work from schools other than Leipzig. Two years are required for the School's diploma. As at Leipzig, there is a seminary conducted for prospective teachers for the lower commercial schools. A tuition fee of $31.25 is fixed for Germans, and double this amount is required of foreigners.

Higher Commercial Schools at Aachen and Frankfort-on-the-Main. — German universities have been narrow, both in the conditions for admission and the range of instruction afforded. The classical gymnasia have been practically the only door into the universities; on the other hand, these universities have educated almost exclusively for the liberal professions. This has brought about the development of higher technical schools outside of the universities. The latter will readily be seen to result from two facts: the strength of general education, and defects in the universities.[1] This so-called "decentralization of technical education" is not without its advantages; it enables the higher schools to keep near to the people, and in consequence technical higher schools are widely distributed in Germany, many of them being in the smaller cities and towns. Hitherto the higher technical schools have devoted themselves to industrial education; but already the tide has set for higher commercial education

[1] "Higher Commercial Education," London *Times*, September 26, 1901.

both in separate schools, as above noted, and in connection with other advanced technical courses.

In 1898 a department of Commercial Science was introduced into the Royal Technical High School at Aachen. The commercial department seemed as a natural step in the development of an institution earlier founded. In general, the terms of admission to the advanced commercial work and conditions for a diploma are similar to those at Leipzig and Cologne.

German cities have shown strong rivalry in founding higher commercial institutions. From the interest aroused in the different cities it would seem that the city schools of commerce are a desirable form in which commercial instruction should be established. Among the cities now able to boast of a separate commercial higher school is Frankfort-on-the-Main, with her Academy for Social and Commercial Sciences. This School is a result of the joint action of four bodies: the City Council, the Institute for the Common Weal, the Frankfort Chamber of Commerce, and the Polytechnic Society. Moreover, the Frankfort Academy has been recognized by three divisions of the Prussian government, — the Education Department, the Ministry of Trade and Industry, and the Home Office. The Frankfort School was begun in the autumn of 1901, and the attendance soon reached five hundred. Students at Frankfort are of three classes, termed regulars, specials, and auditors. In the first class are those who have satisfied the entrance requirements and are duly matriculated with at least eight hours of work per week.

Such will be admitted to the examination for a commercial diploma. Special students are those taking regular studies on various terms, but not candidates for a diploma. Women are admitted into this group. Auditors are those with permission to attend the lectures. As at Cologne, the bulk of the attendance at Frankfort has been of lecture-auditors; in the Leipzig School the most of those in attendance are regular students. The aims of the Frankfort School, general plan of organization, instruction offered, etc., are much like similar features described above for the Higher School at Leipzig.

Higher Commercial School at Berlin. — In the recent developments for commercial education in Germany, nothing is more significant and promising than the establishment of a *Handelshochschule* at the metropolis and capital. Plans for this School are now formulated, and they have been approved by the Prussian Ministry; the School is already in existence, though full provision has not been made for its organization and building equipment. The Berlin institution is primarily under the Corporation of Merchants of the city, and this association has a wide latitude in the management. It is announced that a new building for the School will be constructed by the Corporation on a site just adjoining the Exchange (1904).

The declared purpose of the Berlin *Handelshochschule* is to foster the sciences termed necessary and useful for the commercial vocations. This it will strive to do both through teaching and investigation. The special aims are: —

(1) To give young men of the mercantile class a thorough education, general and commercial, with a special regard for its practical relations to industry and commerce.

(2) To give candidates (both male and female) for commercial teacherships, opportunity to obtain the necessary theoretical and practical preparation.

(3) To give practical merchants and those of allied trades the opportunities to improve themselves in different branches of commercial science.

(4) To afford to officers of justice, consular and administrative officials, and officials of chambers of commerce, etc., the opportunity to acquire professional knowledge of commercial and industrial affairs.

Many of the details of administration for this School show a close adherence to the plans at Leipzig and Cologne. There is also to be discerned the influence of the University of Berlin. The plan of study is definite and well worked out. Approval by the Prussian Ministry has made the course official, and it will likely remain for some time as at present announced. The principal divisions, with subjects under them, are given below:—

(1) *Political Economy.* Especially the nature of banks, exchange, money, and credit; partnership and trade; commercial industries, colonial and social economy, statistics, finance, insurance, history of commerce, and economic geography.

(2) *Law.* Fundamentals of civil and commercial law; exchange regulations, maritime law, insurance laws, social legislation and protection of industries (patent, copyright, and trade-mark laws); legal regu-

lations, especially in international trade; state, administrative, civil, and criminal law.

(3) *Materials of Commerce.* Physics, chemistry, mechanical technology, chemical technology, and industrial hygiene.

(4) *Commercial Technique.* Bookkeeping, commercial arithmetic, correspondence.

(5) *Methods of Commercial Instruction.* Those preparing for commercial teacherships are to be given the opportunity for practical experience in schools under the direction of the Corporation of Merchants.

(6) *Languages.* English, French, Spanish, Italian, Russian, and German.

Societies for Promoting Commercial Education. — Two organizations have been formed in Germany to advance sound commercial education. One is the German Society for Commercial Instruction, and the other the International Association for the Advancement of Commercial Education. Of the former society the late Dr. Franz Stegemann, of Brunswick, was general secretary; of the latter, he was president. Both societies are largely indebted to his devoted leadership. The intelligence and enthusiasm of Dr. Stegemann earned for him the enviable reputation of having done more than any other man in Germany "to further the interests of the best type of commercial education." His recent death in the prime of life is little short of a calamity.

The *Deutsche Verband* has since 1898 published a monthly magazine in the interests of commercial education.[1] The Society has held meetings at frequent intervals, and these meetings have discussed many phases of com-

[1] *Zeitschrift für das Gesammte Kaufmännische Unterrichtswesen*, Teubner, Leipzig.

mercial education. Reports of these meetings and papers prepared for them have been published by the Leipzig bookseller, Teubner. The Society has undertaken to prepare by coöperative effort an encyclopædia of economic and commercial information for Germany; three volumes of this work are already completed.[1] Further to stimulate interest the Society has offered prizes for essays on various questions. The prize list for a single year follows: (1) How should we divide the field of economic geography among the different classes of the commercial training schools? (2) Can we lay down fixed principles for a very uniform presentation of single and double entry bookkeeping in the commercial institutions of instruction? What principles can we lay down as fundamental for the system to be chosen, for the curriculum, and for the method of instruction? (3) How may the young merchant best prepare himself for the trials and difficulties of his life? (4) How may we raise instruction in commercial arithmetic in the higher commercial institutions to the rank of a subject which shall give special mathematical training, taking into strict account the comprehensive needs of a practical professional utilization? (5) In what sort of commercial schools may discussion of commercial products, as well as mechanical technology, find an independent treatment as a subject of instruction? Enumerate the most important commercial products, as well as the most important divisions of mechanical or chemical technology, which can and should be taught

[1] *Handbuch der Wirtschaftskunde Deutschlands.*

with success in the commercial schools. How should the material of instruction be handled?

At the Technical Education Congress held in Paris, 1900, it was decided to form an international association of those interested in commercial education. The initiative was taken by the Germans, who organized a provisional committee and called a general meeting which was held in Zurich in 1901. A permanent organization was effected and a representative committee of management secured. The committee decided to hold a general meeting once in three years, and to have two conferences in the years intervening. The general session for 1904 was called to meet in Russia; the conferences for 1902 and 1903 were held at The Hague and Brunswick, respectively. The objects of the Association are fully set forth in a constitution adopted at Zurich (see p. 348). The original plans have not been fully realized, but enough has been accomplished to show that there is a field for this Association and to warrant the belief that, with proper encouragement, much more may be accomplished in the future. Three aims of the Association especially commend themselves: (1) the publication of a statistical yearbook, in several languages, which should give the facts as to the condition of commercial education in the principal countries of the world; (2) the building a central library wherein may be gathered the literature on commercial education; and (3) the establishment of a central office for the exchange of programs of schools, the furnishing of information, etc.

Various investigations have already been carried on by the International Association, and several reports have been published. One of considerable interest is on the different methods of regulating private commercial schools in the various countries of the world. Two other lines of activity seem promising: the first, that of furnishing tables for a uniform system of keeping and reporting statistics; and the second, the preparation by coöperative effort of an international work on commercial geography. An *International Review for the Development of Commercial Education* has been founded. This is to appear semi-annually; the possibilities of this publication are clearly shown by its earlier numbers. It would seem as almost the only means of securing up-to-date information of the broader movements in the field of commercial education.

Outlook for Commercial Education in Germany. — Prussia at the beginning of the nineteenth century has been pictured as sleeping on the laurels of her great king; the Germans were said to have had no fatherland, their interests being in the clouds of philosophy and poetry. But the Corsican Corporal awoke the German people. At first the national consciousness expressed itself in an intellectual empire; next, under the guidance of Bismarck, there was welded a political empire; and, finally, while still retaining her intellectual supremacy and political cohesiveness, Germany has developed her national life in a new direction. She has, perhaps, more nearly than any other nation, approached the solution of the problems of the modern economic state. Technical schools to

prepare for industry and commerce have already become an organic part of the German system of education.[1]

Several facts must be appealed to for an explanation of the present interest in commercial education in Germany. There has come to be recognized a sort of "fourth estate" in the population; for this, conscious educational provision is made. There is also decreasing reliance upon the apprentice system, and a feeling that the general education and the old forms of commercial education are not adequate for present needs. Much hope for the future will be found in the coöperation of educators and practical men. The chambers of commerce and merchant organizations have been instrumental in establishing and supporting commercial schools. A recent investigation by the Zwickau Chamber of Commerce shows that in 145 commercial bodies from which reports were collected, 112 were actively promoting commercial education. The United States Consul who forwarded this information concluded that Germany "pays almost as much attention to trade education as she does to any other branch of instruction."[2] "Trade education" should not be taken as narrowly technical. Commercial education in Germany has been *education*. With all that may be said of educational progress in that country the conservatism of the leaders is a striking characteristic. Dr. Stegemann, who contributed largely

[1] Rein, "Development of Educational Ideals," in *Education in the Nineteenth Century*.

[2] *Educational Review*, October, 1902, p. 322.

to the recent movement, was outright in the statement that for the present Germany had all the higher commercial schools she should have, — that until time were given for experiments in the existing institutions, the establishment of others was not safe. As long as commercial education is so leavened, both education and commerce are secure.

II. Austria

When Alexander Dallas Bache inspected schools in Europe in 1839, he found well-developed commercial instruction in Austria, and in his report furnished a course of study then offered in the city of Vienna. But in Austria for many years, as in Germany and France, commercial education was limited in extent and of doubtful success. The *Handelsakademieen* of Austria were designed by prominent tradesmen as a training for the sons who were to succeed to them in business, but no appeal was made to the community at large. The fees for attendance upon these schools limited them to the sons of the wealthy. From 1868 to 1888 commercial education was further seriously interfered with by special restrictions of the government in the matter of military service, but in the latter year the Minister of Public Instruction undertook a general reorganization of commercial education, reforms being attempted in the following directions: first, in the organization of the schools themselves; second, in the matter of improving the books and other literature used for instruction; and

third, in the improvement of teachers. The schools were systematized under three heads: continuation schools (*Fortbildungsschulen*), lower (and middle) schools, and higher schools and academies with special courses. On the basis of the preceding classification there was issued a code with uniform courses of study for the schools of each grade. A further proclamation was issued by the Ministry of Education in July, 1903. This modified considerably the curriculum of the commercial academies and higher schools. The new curriculum was promptly accepted by all the schools of the class for which it was made except that at Brünn. The present interest in commercial education in Austria is shown by a liberal state appropriation which is being yearly increased. Besides, there is a voluntary Association of the teachers and others who wish to further commercial education.

The Association last named held a meeting in July, 1903, where many phases of the present outlook were discussed. After such general questions as how to advance the interests of commercial education, methods of improving teaching, increasing the remuneration of commercial teachers, etc., the conference met in sections. The section dealing with continuation schools decided that these schools should be kept open in the daytime, on week days, for at least eight hours a week. These schools have a three years' course, the minimum requirement being given in the following table. There is little to distinguish the continuation school as here treated from the similar institutions in Germany.

	Number of Hours per Week		
	First Year	Second Year	Third Year
Subjects of Study			
The Language of Instruction (*Unterrichtssprache*)	3	—	—
Arithmetic	2	2	1
Bookkeeping and Commercial Correspondence	—	2	2
Knowledge of Trade and Banking Affairs	—	—	2
Geography	1	2	1
Technical Knowledge of Goods	—	—	2
Penmanship	2	2	—

The intermediate or lower commercial institutions are sometimes termed the two-class commercial schools, because their official program requires two years; but the two years are usually preceded by another year termed preparatory. These are the lowest grade of the commercial day schools, and they are essentially technical in character. Students may pass from these to the commercial academies, but the common thing is for those from the lower schools to enter upon apprenticeships. The official program for those schools is furnished on page 103.

Of the commercial academies, or so-called higher commercial schools, there are more than a score distributed in the various parts of the Kingdom. The most famous and the one most largely attended is the *Handelsakademie* at Vienna. The numbers at this School have reached nearly or quite a thousand; it has so well worked out the official

Subjects of Study	Hours per Week		
	Preparatory Year	First Year	Second Year
Required			
Divinity	2	—	—
The Language of Instruction (*Unterrichtssprache*)	6	4	3
Arithmetic	6	4	4
Commercial Correspondence and Office Work	—	3	4
Bookkeeping	—	3	4
Knowledge of Trade and Banking Affairs	—	3	4
Geography	3	3	3
Natural History	4	—	—
Natural Philosophy	4	—	—
Knowledge of Merchandise	—	3	3
Penmanship	2	3	1
Shorthand	—	2	2
Total	27	28	28
Optional			
French, Italian, English, and Czech	—	6	6

program that visitors are unanimous in their approval of the work of the institution. One feature that has called forth special favor is the model office and countinghouse. The curriculum of the *Handelsakademie* as it existed from 1888 to 1903 provided for three years with an additional preparatory year. By the proclamation of 1903 the regular curriculum was made four years, and there is now a fifth year for those who may wish to continue their studies. The program was submitted in two forms, one offering technical subjects earlier than the

Official Curriculum for Commercial Academies in Austria

Subjects of Study	Hours per Week			
	First Year	Second Year	Third Year	Fourth Year
Required				
German	4	3	3	2
French Language and Correspondence	4	4	4	4
English Language and Correspondence	—	4	5	5
Commercial and Industrial Geography	2	2	2	2
History of Commerce	2	2	2	2
Algebra and Political Arithmetic	2	2	2	2
Geometry	2	—	—	—
Commercial Arithmetic	3	3	3	3
Natural History	3	—	—	—
Physics	4	—	—	—
Chemistry and Chemical Technology	—	2	2	—
Commercial Products and Mechanical Technology	—	—	2	2
Knowledge of Commerce	2	2	—	—
Commercial Correspondence	—	2	3	1
Bookkeeping	—	2	3	2
Accounting	—	—	—	3
Laws of Exchange	—	—	—	1
Commercial and Industrial Law	—	—	—	2
Political Economy	—	—	—	2
Penmanship	2	2	—	—
Shorthand	2	2	—	—
Totals	32	32	32	32
Optional				
Bohemian, Italian, Spanish, English, or French	—	3	3	3
Practice in Analytical Chemistry	—	—	2	2
Practical Tests for Products	—	—	2	2
Gymnastics	2	2	2	2
Typewriting	—	—	—	2

other. The arrangement giving the technical subjects earlier is furnished on page 105. Under direction of an expert commission, special text-books have been prepared for use in teaching the official curriculum in the commercial academies of Austria. The official program has detailed suggestions as to the proper methods of presenting various subjects so as to realize the best returns from them.

At the conference of those interested in commercial education held in Aussig (1903) the need for an Austrian higher commercial school of university grade was duly emphasized. It was there decided to work for such an institution, and in doing so to seek the direct aid of the government. The Export Academy at Vienna has often been described as of true university rank, but the Austrians do not themselves set this stamp upon the institution. This Academy was founded by the government in connection with the Royal Museum of Trade Products; its work is in giving a number of special courses, varying many of these from year to year, and in furnishing series of lectures on subjects of interest to those engaged in practical affairs. The aim is to make use of the Museum and to stimulate foreign trade. The Eastern outlook of Austria is shown by placing an emphasis on the Oriental languages.

CHAPTER IV

Commercial Education in France and Belgium

I. France

Commercial Schools: How Regarded. — Commercial instruction has long been furnished in France; but the people in general were not prepared for it, and commercial schools have had until recently slight success and even now they can hardly be said to be successful. The French people have looked with reproach upon *la carrière mercantile*, and this has had a marked effect upon the commercial schools. M. Jacquemart, inspector-general of technical education in France, in a report in 1889, called attention to the facts that while there were four hundred thousand youths annually entering on a business career, only about two thousand of these were getting a commercial education. A more recent account of commercial training by a Frenchman speaks of the comparatively small number who are prepared for entrance upon mercantile pursuits as a "microscopic phalanx." But in the past few years commercial training begins to claim a place with other forms of technical education in France, and France looks to education as one of the means by

which to regain some of her lost trade.[1] The sentiment of Anselme Ricard is becoming more common, "*les écoles de commerce nous sauveront de la décadence.*"

From many sides recent French writers have complained of the insufficiency of technical and commercial instruction, and have instanced the superior training in these lines given by rival nations, more particularly by Germany. But even yet commercial schools in France do not enjoy general favor, and they are not largely attended. A strong emphasis is placed on classical education, and the professions and government positions are overcrowded. It is not too much to say that commercial education will never be popular, perhaps not largely successful, until French society puts a different estimate on various careers. A trenchant attack on the ideals of French education was made recently by Edmond Demolins, in his book, *Anglo-Saxon Superiority.* He makes his argument more convincing by repeated comparison of the French with the German and English speaking peoples.

Primary and Intermediate Schools. — Primary technical instruction in France in recent years has been under the joint control of the ministers of Public Instruction and

[1] At the Congress on Secondary Education in Paris (1900) there were present over three hundred delegates representing the secondary schools of France; at this Congress the following resolutions were passed: That secondary education should endeavor to adapt its methods to the diversity of social needs; that while still ultimately controlled by the central authority, the management of all secondary establishments should be more largely autonomous, and should give fuller consideration to local needs. — *School Review*, January, 1901, p. 58.

of Commerce and Industry. This has given to such schools an anomalous organization. By the financial act of 1892 those schools in which the instruction was chiefly industrial or commercial were to be transferred to the sole control of the minister of Commerce and Industry. Schools have been transferred since that act, and the transfer of them continues. When the schools are so transferred, they are converted into practical industrial and commercial schools. Control by the minister of Commerce and Industry gains in favor in France. In a debate in the French Chamber of Deputies in 1899, it was proposed to transfer the three state schools of apprentices to this ministry, and although the proposition failed at that time, it can be accepted as indicating the trend of educational sentiment.

In 1892 local divisions, departments, and communes were authorized to organize commercial and industrial schools, subject, however, to the approval of the minister of Commerce and Industry. The local organization must guarantee a part of the expenses of such schools for not less than five years. Such industrial and commercial institutions are divided into two sections, one of which is distinctively commercial. These schools are supervised by a council of improvement composed of the prefect or mayor, the inspector of commercial instruction of the district, four members nominated by the general or municipal council, and one member named by the Minister of Commerce and Industry. The duties of this council are as follows: first, a monthly visitation of the school; sec-

ond, to receive and consider reports from the director as to expenditure, and the general condition of the school; third, to attend the final examinations; and fourth, to find employment for the pupils at the completion of their studies. Instruction is gratuitous in these schools, and the pupils are day scholars, except in special instances where resident scholarships are granted by the state or are founded by some local provision. Pupils are admitted at the age of twelve if in possession of a certificate of elementary education; at thirteen such certificate is not necessary, an examination being made to satisfy the conditions of admission. The course of study in these schools occupies three years, at the successful completion of which a certificate is granted. The hours per week are thirty-nine and a half, forty and a half, and forty-two, respectively, for the first, second, and third years, and of these sixteen, twenty-two and a half, and twenty-seven are given to commercial subjects. The hours in the schools for girls are slightly less. Subjects of the official curriculum are as follows: for boys, commerce and book-keeping, one foreign language, arithmetic and algebra, geography, penmanship, chemistry and commodities, common and commercial law, commercial economy, French language, drawing, history, natural history and hygiene, geometry, and elementary physics. The course for girls is substantially the same with the addition of ethics, sewing, and domestic economy.[1] The following statement

[1] Based on the British Consular Report, "Commercial Education in France"; practically the same, but with a less number of hours per week in

of the director of the Boulogne Practical Commercial School was made at the International Congress on Technical Education in 1895, and it is furnished as setting forth the ideals and methods of such schools: —

During the first year the study of the elements of commerce and of commercial documents alone is undertaken. Pupils are required to reproduce the latter by means of numerous exercises, performed both singly and in classes. The latter entails a certain amount of bookkeeping.

This teaching is supplemented during the second year by instruction in commerce (bearing principally upon exchanges, customs, bonded and general warehouses), also by the theoretical and practical study of bookkeeping. During the second term pupils begin to apply their knowledge by keeping a complete set of books, and composing all the documents relating to transactions contained in these books.

During the third year this course of study is completed by further additions to the commercial instruction, including principally banking and calculation of current accounts; by a more exhaustive study of bookkeeping relating to the accounts of companies, and finally by the performance of a task (usually connected with a company) into which the principal difficulties of bookkeeping are introduced. During the whole course the commercial bureau is organized to reproduce as nearly as possible the actual methods employed in business. Of modern

"Trade and Technical Education," Report of United States Commissioner of Labor, 1902, p. 723.

languages English alone was taught (in this particular school). At the end of the third year pupils undergo an examination in the presence of the Council of Improvement and the staff of the school, at the termination of which diplomas are awarded to successful candidates.[1]

In addition to the so-called practical schools of commerce, there are also in France what are known as superior primary professional schools, under the joint supervision of the ministers of Public Instruction, and Commerce and Industry. Though these schools are chiefly industrial, some of them give commercial instruction, elementary in type and practical in character. In the school of this class at Bordeaux, students are organized as a commercial society carrying on fictitious transactions. The subjects of instruction in such schools are bookkeeping and commercial law, ethics, French language and "commercial style," commercial and industrial geography, arithmetic, modern languages, penmanship, drawing, physical exercise, and domestic economy.

Schools under Private Control. — In addition to the practical schools under direct government supervision there are others of a similar grade, under private management, for example, at Nancy, and the Martin Foundation School at Lyons. There are also private institutions in Paris and other cities, which are similar to the business colleges of the United States. Among the best known of the latter is Pigier's Practical Commercial School in Paris. This school receives both adults and younger students, and has

[1] British Consular Report, "Commercial Education in France," p. 8.

sections for males and females. Individual instruction is given, and the office practice and commercial bureau work is highly developed. The best description of this school is to say that in its equipment and methods of work it corresponds closely to the American business school. Indeed, M. Pigier adopts "business college" as the term by which to describe his institution.

The schools not under direct government control are much the more important division in France. The schools carried on under the direction of the Paris Chamber of Commerce are the most complete known in France, and in their various forms have served as models for other schools throughout the country. The Chamber of Commerce furnishes instruction of three distinct grades to meet the needs of three sorts of people. First, free evening classes, in which those engaged during the day, both men and women, may get tuition which they can utilize in bettering their condition in life; second, a commercial school of secondary grade, which will serve to produce educated and intelligent employees for business positions; and third, superior schools, the aim of which is to equip men for responsible directive positions in commercial houses, also to furnish men who are able to turn their knowledge to good account in the furthering of foreign trade.

Free evening classes have been popular in France as in England; Paris and many other cities now have such classes in which commercial instruction is given both to men and women, to adults and young people. The Paris Chamber of Commerce conducts its evening classes three

times a week for both men and women, and these schools are popular and largely attended. The following are some of the places at which instruction in commercial subjects is given to evening classes: the various primary schools of Paris for boys and girls; classes of the Paris Chamber of Commerce at the *Avenue Trudaine* and the *Avenue de la République* schools; at the Polytechnic and Philotechnic Associations, and the classes of the Paris Academic Society of Bookkeeping, with branches at Marseilles, Valenciennes, and Nantes, etc.; and classes of the Philomathic Society of Bordeaux.

The Paris Avenue Trudaine Commercial School. — The commercial school in the *Avenue Trudaine*, Paris, is regarded as a type of its class. The purpose of the Paris Chamber in founding this school in 1863 was to serve commerce by preparing youths for positions where they would serve as active, intelligent helpers; and, secondly, to make possible a career at once certain, lucrative, and honorable, to boys who are industrious and well disposed. The object was primarily to give narrow *commercial* instruction; but it has also been the purpose of this school to turn out those who would be more than mere business machines; recent reports are to the effect that the minds of the director and his staff are much more intent on general education than on the narrower special and technical business instruction. That the plans of the Chamber of Commerce have not failed is shown by the unusual demand which is made for students of this school. The Chamber's report in 1893 spoke of the "daily increasing

earnestness with which men of business and bankers seek for pupils." It is said that the demand for those trained in the Trudaine School is always in excess of the supply, although those in attendance number approximately five hundred annually. For the instruction there is a nominal tuition fee charged, but there have been made available more than two hundred scholarships by state and private establishment. In addition to the four-year curriculum, instruction is given in a preparatory course. Students are admitted into the regular (four-year) course at the age of twelve and a half, but they may be admitted into the preparatory course from the age of eight.

The Trudaine School is fairly equivalent in grade to an American high school, and the possibilities there would seem within the range of accomplishment for us. The curriculum of studies is as follows: French language and literature, English, German, Italian, and Spanish languages, commercial history and geography, arithmetic with elementary geometry, and special attention to mental arithmetic and rapid calculation. Different branches of bookkeeping, penmanship, practical geometry and drawing, shorthand and typewriting with lectures in commercial law, political economy, and the elements of physical science complete the course.

Superior Commercial Schools. — Superior schools of commerce in France were first recognized in 1890 by a state decree extending privileges in the matter of freedom from military service. This was followed with a further declaration with regard to the supervision of entrance

examinations by the state, the nature of the curriculum, and the management of the schools. Later, the schools were recognized in other matters, and may receive subventions from the state. When commercial schools received state recognition, they came under the supervision of the state Ministry of Commerce and Industry, whose authority has been exercised, in some respects it has been felt, to the harm of the schools.[1] State supervision has meant uniform regulation, and it is a question whether any uniform scheme of commercial education can safely be attempted over a diverse country. Marcel Bichon, in an article in *L'Économiste*, held that it was an error to accept state recognition for schools of commerce, because this had meant state uniformity, which he felt was highly undesirable.[2] In an article in an earlier number of *L'Économiste*[3] there had been a complaint against the higher commercial schools in France under three heads: first, identical programs for all schools; second, these programs were too pretentious and not well suited to the needs of the schools; and third, the plan of the schools had been little changed since 1881. To these criticisms M. Bichon replied as above noted, and further urged that in France entrance examinations were too severe. He recommended for local control of the examinations, say-

[1] Teegan, pp. 114, 115; British Consular Report, pp. 13, 14. All commercial schools recognized by the state are under the control of the inspector-general of technical education, who has associated with him a committee, including, among others, eight district inspectors of commercial education. Consular Report, p. 4.

[2] April 8, 1899.

[3] March 25, 1899.

ing that, as the supervision was exercised, the places available in the higher schools were practically limited, and that there should be a larger number of students in these schools, which it was felt could best be brought about by local control of the examinations.

There are marked differences of opinion as to the character of the various higher commercial schools in France. The British Consular Report on "Commercial Education in France" says that higher commercial training can scarcely be said to exist there at all. In all the schools there are, at the most, but two years of study, though preceded in some cases by a preparatory year. Leaving aside the School of Higher Commercial Studies in Paris, the higher schools have not so well-developed commercial instruction as is furnished by the representative higher institutions in Germany, England, and the United States.

The control of the state has come through state recognition, the freeing of holders of certificates from certain military duties, the extension of traveling scholarship privileges, and the giving of funds. Though state recognition and supervision over these schools has been going on since 1890, it is, even yet, exercised to a limited degree only. The schools are largely private in matters of support and internal policy. In all there are thirteen of these so-called higher schools, as follows: School of Higher Commercial Studies, Superior Commercial School, and Commercial Institute, in Paris; and the superior commercial schools in various other cities, including Bordeaux,

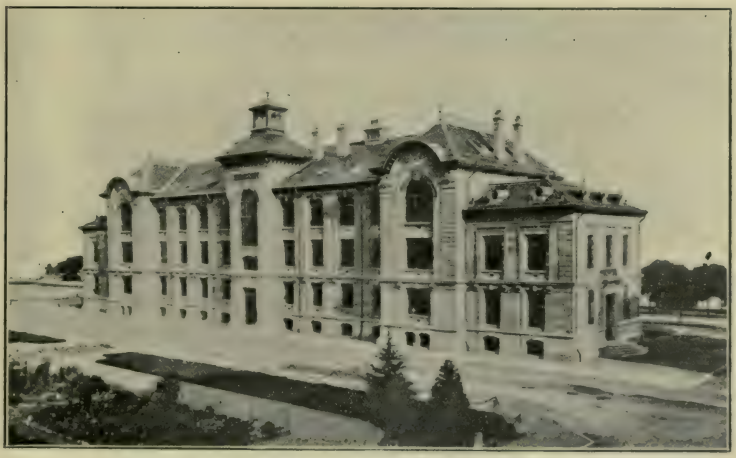
Havre, Lille, Lyons, Marseilles, Montpellier, Nancy, and Rouen. There is much similarity in these schools, but three of them call for special notice.

Superior School of Commerce at Paris. — Paris claims the distinction of having founded the first independent school of commerce that may be classed as a higher school. In 1820 two merchants (Brodard and Legret) made an auspicious beginning in what they termed a Special School of Commerce. Successive changes took place in the first ten years, at the end of which time one of the professors of the School, Adolphe Blanqui by name, secured the institution as his private possession. Blanqui changed the name to the Superior School of Commerce. He took the School to more modest quarters and materially reduced the expenses. For twenty-five years Blanqui labored with rare insight and singular devotion. So largely did the genius of this man dominate the institution that his term of control (1830–1854) is termed École Blanqui. "He sacrificed his person and recoiled before no obstacle, and all this was done in such a way that in studying the history of this struggle one does not know which to admire the most, — his courage, his activity, the variety of his knowledge, the fecundity of his genius, or the charming influence he exercised upon all who came near him."[1] But the struggle was too severe, and in 1854 Blanqui died, at the age of fifty-six.

Another able director succeeded Blanqui (Gervais de Caen), and for thirteen years he carried on the School

[1] Léautey, cited in James, *Education of Business Men in Europe*, p. 56.

SUPERIOR SCHOOL OF COMMERCE, PARIS.



SCHOOL OF COMMERCE, NEUCHÂTEL, SWITZERLAND.

with success. But his untimely death in 1867 left the institution without a director, and after two uncertain years the Paris Chamber of Commerce secured the enterprise, since which time the Chamber has assumed responsibility for its conduct. After a temporary suspension in 1870 the doors were opened, and since then the work and influence of the School have steadily increased. Four periods are thus recognized through which the Superior School of Commerce has passed: (1) 1820–1830, era of foundation, with frequent changes and uncertain results; (2) 1830–1854, period of Blanqui's administration; (3) 1854–1869, a continuation and development of the traditions of the preceding term; and (4) 1869 to the present time, period of increasing prosperity and influence of the School.

Accurate records of pupils were not kept for the period preceding 1869, but the estimated number is above 5000. In 1869, when the Paris Chamber came to the control, the School had but 89 in attendance. About 1874 the numbers increased, reaching 144 in 1878. Following the founding of the School of Higher Commercial Studies (1881) the attendance fell off, being but 108 in 1887. In 1898 the students numbered 190, which was above the capacity of the quarters which the School was then occupying. In November of the year last named the Superior School was reinstalled in new quarters on the *avenue de la République;* here its accommodations are increased to 300. This School has dormitories, and takes students in residence as well as for day instruction.

An important agency in the later development of the Superior School has been the work of an alumni association. This was begun in 1872. In 1876 there was started a Quarterly Bulletin, which later became monthly. The Association holds meetings at regular intervals, aids its members particularly in securing positions, and promotes the welfare of the School.

School of Higher Commercial Studies. — The impulse out of which the *École des Hautes Études Commerciales* was finally developed, was first shown in a proposal of the Paris Chamber of Commerce in 1866. It was then planned to establish a higher institution supplementary to the Avenue Trudaine Intermediate Commercial School. The death of de Caen in 1867, with the purchase of the Superior School, turned attention from the earlier proposal. But there seemed to be an unsatisfied demand for higher commercial education, as evidenced by an agitation carried on for some years. In 1880 the Chamber of Commerce authorized the expenditure of funds for the School, and in 1881 its work was inaugurated. The purpose of the School has been to give a supplementary technical education to those who have been in the intermediate commercial school, or who have already had a general or classical education, and who wish ultimately to enter upon a business career. It presumes upon a greater maturity than do the other superior schools of France, and its work is more advanced. There has been a departure from the original plans to the extent of offering a preparatory course of one year as a sort of

feeder to the two years in the School. This School, as well as the Superior School, receives both resident and day pupils; there are offered a series of scholarships within the School, and its graduates are permitted to compete for traveling scholarships.

The range of fees is relatively high, but the School of Higher Commercial Studies reports that it has no difficulties in keeping up the numbers, and the management announces in April the maximum number to be admitted in the autumn. In recent years the number to be admitted has been fixed at 165. Admissions are by competitive examinations, which are classified as required and optional. The required examinations are both written and oral. The written examination consists of practical exercises in the French language, the writing of a composition in one other modern language (the use of dictionary is permitted), tests in arithmetic, algebra, and geometry, and the preparation of a paper on geography. Twenty-one units in all are allowed for the written work. The oral examination is credited with twelve units, and is made up of tests in arithmetic, physics, chemistry, history, and a modern language (other than French). The optional examinations are on modern languages, one or two not offered in the required examination, and bookkeeping and accounts. The latter subjects seem to have been introduced because of the prominence given to them in the preparatory department of the higher school.

The curriculum of the School of Higher Commercial

Studies includes commerce and computation, bookkeeping and accountancy, two foreign languages, study of commercial products with practical exercises in analysis and testing, economic geography, history of commerce, civil law and administration, commercial, maritime, and industrial law of France, foreign commercial law, political economy, labor and factory legislation, public finance, transportation, mechanical appliances used in business, such as the telegraph, the telephone, etc. The most of the subjects are carried on for two years, the chief emphasis being laid on languages, commerce, computation and accounts, study of commercial products, economic geography, and commercial law. The School makes a special point of its language instruction. Students are required to elect one of the following groups: English and German, English and Spanish, English and Italian, German and Spanish, or German and Italian. The lecture method of instruction is employed in the School, the lectures being given by specialists in the several lines. Students are coached on the making of lecture notes, and are given frequent oral and written tests on the lectures. These tests are given by some one other than the lecturer.

In the preparatory year of this School, instruction is furnished in the French language and literature, arithmetic, algebra and geometry, chemistry and physics, the principles of legislation, geography, history, English, German, and Spanish languages, drawing, and penmanship. By comparison with the subjects of examination for admis-

sion into the higher school mentioned above, it will be seen that this course is primarily to prepare for that examination. Other institutions make a feature of the preparation of students for the entrance examinations of the higher commercial schools. A typical school of this sort is the Institution Frilley, 44, *rue Dulong*.

The School of Higher Studies announces as its object to prepare for careers in commerce, industry, banking, railroading, in consular, ministerial, and administrative positions, and for teacherships in commercial schools. A recent statement of occupations of former students shows that they go largely into various branches of commerce and industry, and to a limited degree to the government service and to teaching positions (see p. 126). Positions are not promised by the School, but an association of its former students makes a point of getting places for the new graduates.

Foreigners are admitted to this School when properly prepared to pursue its work, and on the successful completion of the course are given a certificate. As in the Leipzig Higher School of Commerce the privilege of being auditors is granted to those who merely wish to hear the lectures. This privilege is extended both to Frenchmen and foreigners.

A section of the School gives what is known as the *commercial teacher's diploma*. A limited number of vacancies are fixed in this section each year by the government. These are then competed for by examination. Candidates must be above nineteen years of age, and

when appointed they receive a monthly allowance of twenty-five dollars with free tuition. Candidates who satisfy the requirements are given diplomas to teach in the intermediate or lower commercial schools.

Superior School at Lyons. — The peculiar industries and commercial operations at Lyons have made that city an exception to the general rule among French superior schools. Certain subjects are required of all students, in addition to which they may elect one of three groups: (1) General Commercial and Banking Studies; (2) Studies Preparatory to the Silk Trade and Industry; or (3) Studies Preparatory to the Trade in Dyeing and Chemical Products. The subjects and their groupings are shown in the following table.

SUPERIOR COMMERCIAL SCHOOL AT LYONS

SUBJECTS	CLASS HOURS PER WEEK	
	First Year	Second Year
Studies Common to All Three Groups		
Commercial, shipping, and industrial law	2	2
Labor, fiscal, and customs legislation	—	2
Political economy	—	2
History of commerce	—	1
French language	1	1
Modern language	4	4
General Commercial and Banking Studies		
Commerce and bookkeeping	12	12
Penmanship and commercial correspondence	3	2
Economic geography	3	3
Study of merchandise	3	3
Second modern language	4	4

SUPERIOR COMMERCIAL SCHOOL OF LYONS[1] (*continued*)

SUBJECTS	CLASS HOURS PER WEEK	
	First Year	Second Year
Studies preparatory to the Silk Trade and Industry		
Theory and practice of the special trade in silk goods	18	16
Bookkeeping and penmanship	3	2
Economic geography	2	2
Technology of textiles	1	1
Applied mechanics	1	1
Drawing	2	2
Studies preparatory to the Trade in Dyeing and Chemical Products		
Theory and practice of the special trade in dyeing products	2	25
Theory and practice of the special trade in chemical products	25	2
Bookkeeping and penmanship	3	2
Economic geography	2	2
Applied mechanics and physics	1	1
Drawing	1	1

Results from training in commercial schools are worthy of note. Such schools have not been conducted long enough in the United States to give conclusive evidence. The success of the French higher schools in shaping the future careers of their students is shown by the following table, indicating the future occupations of those who have been in attendance upon three representative institutions: —

[1] British Consular Report, pp. 29–31.

OCCUPATIONS ADOPTED BY FORMER STUDENTS

OCCUPATIONS[1]	High Commercial Studies Paris	Superior Commercial School Paris	Superior Commercial School Lyons
Trade	449	1326	815
Brokers, commission agents, etc.	113	241	54
Industrial occupations	615	1255	—[2]
Banking	105	241	90
Insurance	22	42	16
Railway companies' service	9	14	—
Various occupations connected with shipping	—	32	—
Agriculture	2	27	31
Teacherships	8	29	10
Sworn translators	2	2	—
Directorship, commercial schools	—	1	—
Government service	29[3]	58	8
Bar and magistracy	7	19	14
Journalism, etc.	—	15	2
Army	1	4	4
Art	—	—	4
Bookkeeping	—	—	17
Number of students inquired about	1388	3427	1545

II. BELGIUM

General Commercial Education in Belgium. — Belgium is a typical industrial and commercial country, and, as might

[1] For the High Commercial School the figures date from 1881; for the Superior School, Paris, from 1869; and for the Lyons School from 1872. The students included in the total numbers, but not accounted for in the list of professions, may be classified under the heads of "Retired," "Performing Military Service," "Lost Sight Of," "Dead." A small proportion have never entered any profession or career. — British Consular Report, "Commercial Education in France," p. 34.

[2] Included under "Trade."

[3] Sixteen consuls and consular clerks.

be expected, has given much attention to the training of the classes who are to carry on both manufacture and trade. Commercial instruction is a part of the system of state education. In the first six years the aim of the schools is described as "general and practical." Following this, in what would be the grammar schools with us, pupils are permitted to elect between general and commercial courses. Those who elect the latter study the modern languages, bookkeeping and business practice, commercial arithmetic, shorthand and typewriting, commercial law, and political economy. This course extends over three years, and under normal conditions it is expected that the student will finish at about fifteen or sixteen. This course is meant as a preparation for junior clerkships and office positions. Those who complete the preceding and take positions are permitted to continue their studies in the technical evening schools of commerce, and may eventually gain admission into the higher commercial schools.

Those who complete the more general course in schools above compared to our grammar school, are offered in continuation a three-year curriculum in a day school of commerce. This, for the average boy, covers the years from fifteen or sixteen to eighteen or nineteen, and the school corresponds fairly to the American secondary school of commerce. These schools emphasize the modern languages and furnish instruction in the more practical business subjects, and also in commercial geography, commercial law, history of commerce, and political econ-

omy. After passing through this secondary school it is expected that young people will take more responsible business positions, or they may enter the higher commercial schools.

Higher Commercial Education in Belgium. — Belgium is generally credited with having founded the first commercial institution of true university grade. In 1847 the Belgian Minister of Foreign Affairs made a proposal to the City Council of Antwerp and to the Provincial Council for higher institutions to give commercial education. Both bodies took favorable action on the suggestion. The proposal was further strengthened by the monograph of a Belgian merchant, *Proposition for the Organization of a Belgian University of Commerce and Industry.* The plan of organization was considered until 1852, when the Belgian Minister of the Interior made an offer to the City Council of Antwerp that the city meet one-fourth the necessary expense of the institution and the state pay three-fourths. The Council accepted the offer, and agreed to furnish the equipment for the School. The plans were quickly completed, and the Antwerp Superior School of Commerce began its work in 1853. Relatively but a small proportion of the expense of the School is secured from tuition. The deficit is met by state and city appropriations, the former still contributing three-fourths and the latter one-fourth of the total. The School is controlled by a commission, of which the Mayor of Antwerp is president *ex officio.* The Minister of the Interior and the City Council of Antwerp each names an equal number of

SUPERIOR COMMERCIAL INSTITUTE, ANTWERP.

INTERIOR OF SUPERIOR COMMERCIAL INSTITUTE, ANTWERP.

this commission. The director of the School is also a member of its governing body. The Antwerp Institute is a day school only.

From the first the influence of the Antwerp Superior Institute has been very great. For a term of years more than one-third of the students were foreigners; thus was evidenced the high regard in which the instruction was held abroad. Its native students were sons of prominent merchants and men of affairs. From 1862 to 1869 the average attendance was 86 a year; from 1870 to 1886 the average was 128. In the more recent years the attendance has increased still further. The number attending in 1898 was 249, of whom 163 were natives and 86 foreigners. The total attendance in 1903 was 208, of whom 104 were registered for the commercial diploma, and 77 diplomas were granted. There are at present in service at the Institute 18 professors. The total budget for 1903 was 137,000 francs, of which the state paid 60,000, the city 20,000, and the balance came from fees and other sources. The Antwerp Institute has served as a model for several other higher commercial schools, both in Belgium and abroad. The Institute entered upon work in a new building in 1898. This building cost $150,000, which was provided partly by the Belgian government and partly by the city of Antwerp.

Recent improvements in Belgian commercial education have been due to two influences, — governmental reform and private initiative. In 1893 the Belgian government considered with the Supreme Council of Industry and

Commerce the question of securing properly prepared persons for its consular service; out of that conference there came the reorganization of commercial education. Royal decrees were issued in 1896 and 1897, giving new powers to the state universities and to the Superior Institute of Commerce at Antwerp. These decrees empowered the state universities at Ghent and Liège to grant *licencié du degré supérieur en sciences commerciales et consulaires*, and added a third year of study to the course of the Superior Institute at Antwerp. Parallel with these governmental changes, private organizations established commercial instruction in several of the Belgian cities.

Three institutions should be especially noted as giving higher commercial instruction in Belgium, — the state universities above-mentioned and the Superior Institute at Antwerp. The universities are empowered to grant a superior degree in the commercial and consular sciences, and the Superior Institute gives two degrees, — one for its two-year course, *licencié en sciences commerciales*, and the second, the higher degree above-named. The first degree is granted at the conclusion of the two-year course upon a successful examination in the following subjects: general commercial affairs, general and commercial geography, history of commerce and industry, political economy and statistics, commercial and maritime law, international law as it relates to commercial affairs, customs regulations in Belgium and foreign countries, commercial products, shipping and maritime construction, and

in the following languages: French, Dutch, German, English, and Spanish or Italian. For the degree of the third year other subjects are added to the above list. The curriculum for the third year includes the following: public administration and constitutional law, commercial and maritime law, civil law and consular regulations, study of commerce, higher commercial arithmetic, industrial technology, political economy, transportation, and English, German, Dutch, Spanish, Italian, Portuguese, and Russian languages (see p. 326).

Professors at the Institute are well paid, and after a certain number of years in service they are retired on a pension. Students' fees are nominal, being $40 for the first and $50 for the second and third years. An association of former students promotes the interests of the Institute. Traveling scholarships are bestowed upon the most promising students. The accomplishment of its former students is a testimonial to the efficiency of the Superior Institute in Belgium. A statement of their careers showed that 249 were managers of large mercantile enterprises, 218 were managers of banks and commission businesses, 6 were Consuls-General, and 32 were Consuls or Vice-Consuls.[1]

[1] Hooper and Graham, *Commercial Education at Home and Abroad*, p. 115.

CHAPTER V

Commercial Education in England

English Education, Classical and Insular. — Under the head of "Higher Commercial Instruction in England," Professor James (1893) said that the subject could be disposed of in a very few pages, — that it was not far from the truth to say that there was no such instruction given in England at all. Sir H. Trueman Wood concluded a paper on "Commercial Education in England," as late as 1899, with a comparison of what he had written with the celebrated account of Snakes in Ireland. The education of England in its spirit and emphasis is classical. In the main features of its education and in its language-study, England has largely ignored the rest of the world. English character and England's favorable geographical position have given to the nation a commanding place in the world's industry and trade; but improved communication and cheap transportation have made commerce less a matter of geographical position than formerly. On the other hand, German and American education are supplanting English character; or, through education the German and the American have developed traits that are rapidly making their way

against the native quality of the Englishman.[1] At intervals for almost forty years England has had spasms of fright because of foreign competition. This has led to what has been termed "technical educational scares." Successive royal commissions have dealt with the matter of education and its relation to trade and industry. The "Made in Germany" cry of the late nineties has been quite matched by the "American Peril" agitation of the last couple of years. Recent tendencies in foreign trade are a source of concern to students of English commerce, as well as to educators; the consular reports of the English government give a most alarming recital of the failure of English merchants through lack of preparation, and of the success of German and other rivals because of the possession of those qualities that Englishmen so sadly want. The Royal Commission on Secondary Education regarded these complaints, and felt they were to be taken into account in educational changes. "Much — much more than is now done — might be done, not merely to fit such boys and girls for the practical work of their respective future careers, but

[1] "The reason that commercial education has received but little attention in England till now is because the people have a highly developed instinct for trade. Then, again, the geographical position of the country, together with a combination of circumstances, has greatly assisted England to become the first commercial nation in the world. In Germany, France, Austria, and other nations of Europe the unfavorable geographical position and adverse circumstances have awakened the people to a realization of the fact that it is only a superior educational training that will put the merchants and manufacturers in a position to compete with those of England." — Harris, United States Consular Report, January, 1904.

to make them care for knowledge, to give them habits of application and reflection, to implant in them tastes which may give the delights or solaces outside their workaday lives. Not a few censors have dilated upon the disadvantages from which young Englishmen suffer in industry and commerce, owing to the superior preparation of their competitors in several countries of continental Europe. These disadvantages are real."[1]

England's industrial and commercial success outran in a measure her educational provision, and this was sure to bring its results. Mr. James Bryce, writing some years ago, inferred that the commercial classes had not reached to the relative position of wealth and greatness occupied by England herself, and attributed this fact chiefly to deficiencies in secondary education.[2] English education is essentially individualistic. Says a recent writer, "Our educational fauna, as often happens on islands, is distinct from the fauna on the neighboring continent." The same authority reports that not only are the different schools different, but there are striking differences in the treatment of the classes within a school and the students within a class. This is most in contrast with educational methods in Germany. The German way gives a higher average of intelligence and efficiency; the English a lower average with the marked development of a few.[3]

[1] Report of the Commission, Vol. I, p. 328.

[2] James Bryce, Introduction to *Studies in Secondary Education*, p. 28.

[3] Sadler, *Problems in Prussian Education*, p. 114.

The criticism most often urged against England's education is an over-emphasis of the classics. This has resulted in class distinctions — a sort of an educational aristocracy with the badge of Greek and Latin. A member of the Mosely Commission could scarcely believe that American schools have students pursuing the classics and commercial subjects side by side without those on the commercial side being discredited. Caste, says a British monthly, is the millstone about the neck of British industry; to an aristocracy of birth there is added an aristocracy of culture; work is too often looked upon as a vulgar necessity. A new monthly, established primarily in the interests of commerce, thus analyzes the situation: "The classics are fashionable; education for business is not. Public opinion, or public lethargy, upon the matter is quite as much to blame as the schoolmasters. The schoolmasters must give the public that which the sacred convention demands. Yet, with a little encouragement, scores and hundreds of schools would be ready to shake off for the twentieth-century boys the dead hand which Erasmic and Renaissance traditions have laid on secondary schools ever since the sixteenth century. The mischief is that the encouragement so slowly comes. In this country we are still playing at school, like children in a nursery."[1] Continuing, the same journal adds a suggestion for a remedy: "Where there is a school from which the dead hand has been lifted, let parents know of it; where there are parents willing to flout the 'sacred convention,' let the school-

[1] *Magazine of Commerce*, December, 1902.

masters hear from them. Communication — intercommunication — that is what is now required."

So often have the warnings been repeated, and so unmistakable is their meaning, that English publicists and educators alike have come to feel that in the preparation of their merchant class there is need for radical change. Many Englishmen agree with the Duke of Devonshire, that the question of commercial education is more than a class matter, that it enters into the range of practical politics, and that the welfare of the Empire is bound up with it. Already this feeling has expressed itself in a policy that makes it no longer possible to say that because England has no commercial education the subject may be dismissed in a word.

Early Movements toward Commercial Education. — The earliest special school for the training of business men in England of which any record has been found in the present investigation was that of Thomas Watts. This school was described by its enterprising proprietor in 1717 as being able to "qualify" young men for any sort of business "after a new, expeditious, and improved manner of instruction, free from the interruptions and loss of time in the common schools." Writing, arithmetic, and accounts ("after the methods of real business"), different branches of mathematics, "experimental philosophy," French, and drawing were advertised. In his announcement of 1717 Watts furnished a fifty-page essay on "The Proper Method for Forming the Man of Business." This, so far as could be learned, was the earliest didactive

treatise on commercial education.[1] Watts had a remarkable grasp of the problem with which he dealt. He argued first for the importance of education in general, and then to the conclusion that different capacities and tempers of mind require different treatment. Penmanship, arithmetic, accounts of different kinds, were intelligently treated. In the latter, he described at some length the Italian (double entry) method of bookkeeping. Mathematics, including geometry, surveying and measuring, commercial law, navigation, geography, English style, modern languages, and drawing were each in turn discussed from the standpoints of their practical value and the ways they could be utilized for training. As one reads this old tract he wonders whether the rank and file of school principals and teachers have yet come up to the advanced position taken by its author nearly two centuries ago.

Public sentiment in England has been slow indeed in responding to appeals for special education for the commercial classes. The example of Germany, with close connection between her growing industrial power and commercial success, and her education, gave the text to J. Scott Russell in 1869, Thomas Twining in 1874, and Sir Philip Magnus in 1888. The books of these men are chiefly interesting historically, but they show the efforts of leaders to move the sea of British indifference. The practical men were first to respond. In 1870 the Chamber of Commerce in London held a conference on commercial education, and of this conference a report

[1] This rare pamphlet is in the Library of the University of Pennsylvania.

was issued. The Royal Commission of 1884 on Technical Education said, "In this matter of education we seem particularly deficient as compared with some of our foreign competitors; and this remark applies not only to what is usually called technical education, but to ordinary commercial education which is required in mercantile houses, and especially in the knowledge of foreign languages." In 1885 commercial education was again discussed by the London Chamber of Commerce, and two pamphlets on the subject were published. The next year the Chamber not only favored the general proposition for commercial education, but it took more definite steps toward securing such education. The education required, it said, was of several distinct grades, and should be adapted to the needs of many separate groups. To meet the needs of those who enter business offices about the age of fourteen, day continuation schools were thought to be required which would give to boys a two years' course of special training. Also it was thought desirable that there should be in many of the public secondary day schools in London, departments devoting themselves primarily to the preparation for commercial life of boys who left school at eighteen or nineteen, and further that the curricula of such departments should not lead up to classical or mathematical careers at the universities; but they should prepare their pupils either to enter the higher ranks of commerce or to pursue an advanced course of study in the economic and commercial department of London University, or in other institutions giving higher commercial education.

Examination System and the London Chamber of Commerce. — In dealing with commercial education the London Chamber went the way of English education and instituted a system of examinations. Such examinations were also offered by some of the older examining bodies; more recently they have been given by the technical educational boards of various county councils (see p. 146). It is probable that the supervision over examinations in commercial subjects was more sympathetic when exercised by the technical bodies. It is likely, also, that at the time these examinations were inaugurated by Cambridge and Oxford, the country was not ready for them. In any event, the general examining boards have been withdrawing from this field. The Secretary of the Oxford Local Examinations reports, "The Delegates of Local Examinations have ceased for several years to conduct an examination in commercial subjects, the demand for such an examination having proved to be quite insufficient to warrant this board in continuing to hold the examination."

The London Chamber of Commerce would almost seem as a model for such organizations throughout the world. With its membership of some four thousand and its division into committees and subcommittees, it carries on a useful and highly specialized work.[1] The Chamber has an able committee on commercial education, of which Sir Albert K. Rollit has for several years served as chairman. There is also an employment department which

[1] See Rollit, *Chambers of Commerce and their Functions.*

supplements the work of the committee on education. The educational work of the Chamber is of two sorts: as an examining body and as a teaching body. Examinations are given for junior and senior certificates. That for the first is rather elementary and technical; for the second it is more advanced. First of all, prospectuses or syllabuses are issued, giving the general outline on which the examinations will be conducted. The Chamber prepares the examination questions and gives general supervision to the examination. After the examinations have been held, the Chamber issues in pamphlets the complete sets of questions used for both junior and senior certificates. The annual distribution of prizes from these examinations has always been made an occasion of importance. Men of first rank in public life are secured as speakers, and the opportunities are used again and again to show the necessity for commercial education. Lists of those who pass both the junior and senior examinations are issued, and these are used by the employment department of the Chamber and by members of the Chamber and others seeking employees.[1] For some years there has been an

[1] The conditions for the certificates are as follows: —

SUBJECTS AND ARRANGEMENTS FOR SENIOR CERTIFICATES

1. — *Required Subjects*

(*a*) English.

(*b*) Foreign (including Oriental) Languages. Any two preferably including one other than French or German.

(*c*) Mathematics.

(*d*) Commercial History and Geography.

(*e*) Elements of Political Economy.

understanding that preference would be given by members of the London Chamber to those young men who held certificates from the Chamber's examinations, but more recently such action has become more of a settled policy, and at present many Chamber of Commerce men are under pledge to give first claim to those who have been successful in the Chamber's examinations. Three hundred firms have agreed to discriminate in favor

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2.— *Optional Subjects*

From which the candidate may select any two: —

1. Mathematics, including the required portion treated more fully, and in addition Trigonometry.
2. Latin.
3. Machinery of Business.
4. Banking and Currency.
5. Commercial and Industrial Law.
6. Bookkeeping.
7. Chemistry.
8. Physics (Mechanics, the Properties of Matter and Heat; or, Mechanics, the Properties of Matter and Electricity).
9. Geology and Mineralogy, including Petrology and Metallurgy.
10. Botany.
11. Zoölogy.
12. Microscopic Manipulation.
13. Drawing: Freehand or Perspective or Geometrical or Building Construction or Mechanical or Designing.
14. Photography.
15. Shorthand.
16. Typewriting.

Subjects and Arrangements for Junior Certificates

1.— *Required Subjects*

(*a*) English Essay, including Handwriting and Orthography, and Analysis.

(*b*) Arithmetic, including a knowledge of the Metric System.

(*c*) A Modern Foreign Language, comprising Translation, Dictation, Composition, and Conversation. (Conversation will be insisted upon.)

(*d*) Elementary Drawing. (Freehand, Geometrical, or Designing.)

(*e*) Elementary Chemistry or Physics, which must be studied practically. (One of these subjects will be insisted upon.)

of the Chamber's certificate holders. The examinations as above described are given in some forty-six different schools and centers in London, and in numerous other cities of Great Britain, and in some of the more remote parts of the Empire.[1] The list of those who pass for a single year includes hundreds of names (for example, in 1902, 237 had junior certificates in shorthand, and 405 senior certificates in bookkeeping).

In the second place the London Chamber is a teaching body for what it terms the subjects of higher commercial education. Under this head its work is of a twofold

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2. — *Optional Subjects*

Group A. Mercantile. At least two, but not more than four of the following: 1. Commercial Arithmetic. 2. Bookkeeping. 3. History, including Commercial History and the elements of Political Economy. 4. Commercial Geography. 5. Advanced Drawing, either Freehand and Model, Designing, Mechanical, Geometrical, or Perspective. 6. Shorthand. 7. Typewriting.

Group B. Linguistic. At least two, but not more than four of the following: 1. French. 2. German. 3. Spanish. 4. Portuguese. 5. Russian. 6. Italian. Latin may be taken, but does not count as one of the necessary languages.

Group C. Mathematical. At least two, but not more than four of the following: 1. Algebra. 2. Euclid. 3. Trigonometry. 4. Statics. 5. Dynamics. 6. Hydrostatics.

Group D. Scientific. At least two, but not more than four of the following: 1. Chemistry. 2. Sound, Light, and Heat. 3. Electricity and Magnetism. 4. Botany. 5. Geology. 6. Mechanics.

In addition to the certificate for satisfying the senior or junior conditions, a certificate is issued for one or more subjects if the candidate is successful.

[1] Selected lists of questions are given on pp. 329 sqq. Various pamphlets connected with this work are sold at a nominal price.

nature. It gives class instruction and courses of lectures in the foreign languages, and such subjects as commercial history and geography, banking and currency, commercial and industrial law, and machinery of business. This instruction is in part preparatory to examinations, and in part to broaden the Chamber's influence by supplementing and improving the work of other institutions in giving teachers an opportunity of getting instruction from practical men who are specialists in the best sense of the word. In addition to the foregoing there are occasional single addresses termed "voluntary lectures." These are by leading experts, and are given with a view to their being published, and thus of service to a wider public that is unable to attend. The Chamber has a Pamphlet Series for Higher Commercial Education, including such titles as: "Insurance and the Machinery of Lloyds"; "Bills of Exchange and their Functions"; "The Stock Exchange and its Machinery"; "The Telegraphic Lines of the Empire"; "Bookkeeping in its Relation to Commerce"; "Education Preparatory to Commercial Pursuits"; "Foreign Exchanges"; "The City Guilds and their Relation to Commerce and Education"; and "Chambers of Commerce and their Functions, including Commercial Education."

Important as the above work is, it is by no means all that the London Chamber of Commerce has done for commercial education. In 1898 there was called a general conference on the subject. This conference met in the Guildhall, with Sir Albert K. Rollit, M.P., the president

of the Chamber, as chairman. Invitations had been issued to various trades bodies and educational organizations in the realm, and more than two hundred delegates were named to attend the conference. Representatives were present from boards of trade in Aberdeen, Birmingham, Bradford, Croydon, Dublin, Edinburgh, Greenock, Ipswich, Lancaster, Leeds, Lincoln, Liverpool, London, Newport, Oldham, and Plymouth. Among the representatives of education in attendance were Sir John E. Gorst, M.P., Michael E. Sadler, Graham Wallace, C. W. Bourne, W. A. S. Hewins, and others well known. Six papers were presented in full in report of the conference, dealing with the following subjects: "Commercial Education and Secondary Schools"; "Continuation Schools and Evening Classes"; "The General Organization of Foreign Higher Commercial Education"; "The German Ideal of Higher Commercial Education as exemplified in the Leipzig Commercial College"; "Tertiary Schools of Commerce for England"; and "The Organization of Higher Commercial Education." The papers above mentioned were discussed, each in turn, by men engaged in commerce and those directing education, — in all, more than forty contributed to the discussion. The papers fairly stated the issues as to the ideals for commercial education and the means by which these may be realized, and each of them provoked sharp discussion. It was in discussion that this conference was at its best. Sir Albert K. Rollit, in his opening speech, defined commercial education, pointed out the necessity for it, and urged that the repre-

sentatives of commerce there present should tell what was needed, and that the educational experts should show how the need could be met by supplementing, rather than supplanting, the educational machinery already in existence. This speech fairly epitomizes the proceedings of an important conference.

The *London Journal of Education* in August, 1898, gave what it considered the net results of the Chamber of Commerce conference as follows: British boards of trade were compelled to abandon the idea that examinations in commercial subjects were a sufficient stimulus to educate for commerce; second, the opinion was general that a number of sound secondary schools of a commercial character ought to be established in various parts of the realm; and third, the belief was common that a satisfactory education is possible in subjects that will prove useful in after life.

At the conclusion of the conference a general committee was appointed to carry out its program, and this in turn appointed a subcommittee to draft a manifesto in which should be stated the salient points on which there seemed to be agreement. The report of the subcommittee was made to the general committee of the Chamber, and by them revised, "line by line." The Chamber later published the results as a supplement to the proceedings. In brief, the finding of the subcommittee was, that secondary schools shall have their teaching strengthened on the modern side, with more attention to languages, geography, physical science, and arithmetic; and that selected pupils,

from sixteen to eighteen years of age, be given opportunities for highly specialized commercial instruction in colleges attached to the various local universities. The report of the subcommittee did not favor abandoning the Chamber of Commerce examinations. The results of the Guildhall conference were many, both in London and outside. First of all, there came about a better understanding between the London school authorities and business men who employ young people, both in regard to the evening continuation schools and secondary day-school work.

London County Council. — The Technical Instruction Act of 1889 has been interpreted to cover commercial education, and the various county and city councils in England have rendered conspicuous service in establishing this form of instruction.[1] Of the aid of this kind, that given by the Technical Education Board of the London Council is the most notable. In May, 1897, this Board appointed a committee to inquire into the agencies then in existence for giving commercial instruction in London, and to suggest a plan for establishing other agencies or increasing the efficiency of those existing. This committee was empowered to incur expense in pursuing its investigation, and to invite expert educators and practical business men to attend its sessions for the purpose of giving evidence. Among those who were before the committee were Professor Layton of the Superior Institute of Commerce at

[1] "Present Status of Industrial Education in Great Britain," Chapter VI of Annual Report of the United States Commissioner of Labor, 1894.

Antwerp, Professor W. A. S. Hewins of the London School of Economics and Political Science, also experienced bankers and merchants. The investigation of the committee was so systematic, and its conclusions so sound, that they may be taken as an important contribution to the discussion of this subject in England. Similarity of conditions in many American communities gives an interest to the conclusions and recommendations. Its findings were as follows: —

> That further and better provision for commercial education was urgently required; and that it should be the object of the Technical Education Board, so far as its resources permitted, and so far as was consistent with other claims, to assist in supplying this need.
>
> That the commercial education required was of several distinct grades, and should be adapted to the different needs of many distinct groups.
>
> That, to meet the needs of those who enter business offices about the age of fourteen, day continuation schools were required, which should give a two years' course of training specially adapted for commercial life.
>
> That it was desirable that there should be in many of the public secondary day schools in London departments devoting themselves primarily and avowedly to the preparation for commercial life of boys who will leave school at sixteen; that in such departments, while a good general education should be given, special attention should be devoted to modern languages in such a way as to turn out pupils able to speak and correspond fluently in at least two modern languages; to the teaching of arithmetic so as to secure perfect facility in the use of the metric system; and to insuring a good general acquaintance with the commercial geography of foreign countries.

That it was desirable that there should be provided in London in at least one public secondary day school of the first grade a department devoting itself primarily and avowedly to the preparation for business life of boys leaving school at eighteen or nineteen; that the curriculum of such department should not lead up to a classical or mathematical career at the universities, but should qualify its pupils either to enter the higher ranks of commercial life or to pursue an advanced course of study in the economic and commercial faculty of London University, or in other institutions of higher commercial education.

That it was desirable that a certain number of senior county scholars should go through a university course in subjects of higher commercial education; and that, in addition, traveling scholarships should be offered to enable teachers of some experience to study in higher commercial institutions abroad, in order to qualify themselves as teachers of commercial subjects.

That efforts should be made by the board to extend, improve, and coördinate the teaching of commercial subjects in evening classes, especially in such departments as foreign languages, the metric system of weights and measures, economics, commercial history and geography, shorthand, and bookkeeping.

That special efforts should be made to obtain the coöperation of representatives of different branches of the business world in carrying out this program; and that negotiations be entered into with the London Chamber of Commerce, the Institute of Bankers, the Institute of Actuaries, and other associations holding examinations in commercial subjects, with a view to securing their coöperation, especially in obtaining the recognition by commercial men of leaving certificates, and in securing a closer union between the teaching and examining bodies.

The investigation above noted may be taken as a point of departure for the later history of commercial education in London. The service of the Council to higher and secondary commercial education is noted below in the treatment of the London School of Economics and Political Science, and the London University School; some account should also be furnished of commercial work done in other secondary and technical schools connected with the Technical Education Board. The polytechnic schools are reported by the secretary of the board to lend themselves most naturally to this kind of education; the secretary furnishes a report of the Southwestern Polytechnic in Chelsea as typical of various other schools in London. Commercial work in this school was established and is conducted in accordance with the report of the special committee on commercial education. Instruction is furnished for both boys and girls; the course is for two or three years, and the ages of pupils from fourteen to sixteen or seventeen. The program here is less ambitious than that of the London University School. The subjects of instruction are English (literature, language, composition, and handwriting), French and German (including conversation and correspondence), mathematics (including commercial arithmetic and the metric system), commercial geography, history, practical geometry, freehand and other drawing, elementary science, and physical training. It is the purpose of the course to furnish thorough training for those who go directly into business life. Students

are prepared for the examinations of the London Chamber of Commerce, the Society of Arts, and the Institute of Chartered Accountants. Preparation is also given for the matriculates' examination of the London School of Economics and Political Science.

Other Examining Bodies. — Examinations by other societies and boards in England are common. Among those to be mentioned is the Society of Arts, which aims to aid in the preparation of those going into commerce, as does the city and guilds of London Institute aid those going into industry. The Society of Arts examinations date back as far as 1856, but at first they were quite general in character. In 1873 there was inaugurated a series of technological examinations, and later when there was a demand for them there were added examinations on commercial subjects. In 1897 the International Congress on Technical Education met in London at the invitation of the Society of Arts, and one of the leading topics before that congress was commercial education. In more recent years the Society of Arts examination is reported as "distinctly satisfactory." The centers at which the examinations are held number quite 300; the candidates are 9000, and the number of separate papers is approximately 10,000.

Other bodies seeking to encourage their special subjects by examinations and prizes are the Institute of Bankers, the Institute of Actuaries, the Institute of Chartered Accountants, and the Society of Accountants and Auditors. The last named aids the Chamber of Commerce

scheme, among other things giving a prize in the book-keeping examinations.

If an outsider might express an opinion on the English practice, it would be that there is too little instruction and too much examination. Stock questions are common, and English schoolmasters where the examinations rule, can not well get away from the cramming process. Too frequently the number of "passes" is noted as the criterion of success. Examination may thus defeat the ends for which they were established, and instead of stimulating true commercial education they may depress and hinder it. A refreshing paper on this subject was read before the International Congress in 1897 by Professor J. Weertheimer, "The Influence of the Various Examining Bodies on the Progress of Technical and Commercial Education in England." The conclusion reached was that the multiplication of examinations by different societies is in every way undesirable. The ideal of amalgamation of different boards was advocated, in the hope that one set of commercial examinations with one certificate of recognized value might be given throughout the country.[1]

County Council of the West Riding of Yorkshire. — A distinct advance upon the unaided examination is the system of inspection and supervision established by the County Council in the West Riding of Yorkshire. The movement for this dates back to the early nineties, and already the work has continued sufficiently long to warrant a deduction as to results. The plan contemplated "a thorough

[1] *Journal of the Society of Arts*, July 16, 1897.

system of expert inspection," with systematic courses and detailed syllabuses; suggestions for teaching were furnished, also classes organized for the training of teachers; the financial support of the Councils was offered in a scale of grants. No schools are carried on by the Councils, but through its inspector it aids in organizing both classes and schools. The financial aid which it distributes has also been an important agency in supporting commercial education.

First in the West Riding are the Evening Schools of

GENERAL SUBJECTS	FIRST YEAR	SECOND YEAR	THIRD YEAR
Business Methods and Correspondence.	Home Trade.	Export Trade.	Home, Export, and Import Trades.
Bookkeeping.	Elementary.	Intermediate.	Advanced and Company.
Commercial Arithmetic.	Elementary.	Advanced.	
Commercial Geography and History (mixed course).	The Empire.	Foreign Countries.	Special "Trades."
First Modern Language.	Elementary and Part Intermediate.	Part Intermediate and Advanced.	Advanced and Commercial.
Principles of Commerce.			Introductory Course.
Shorthand.[1]	The Manual (correspondence style).	The Reporter (60 words a minute).	Speed (100, 120, and 140), or Second Modern Language.

[1] If it is desired, a course in typewriting may be taken during the third year on an evening not taken for the other work.

Commerce. These give systematic instruction for two years in some centers, and three years in several others. The schools meet for two and a half hours each evening for three evenings a week. Sessions are continued from thirty to thirty-three weeks in the year. The preceding table shows the subjects of study in these schools.

In addition to the preceding, a fourth evening of the third year is suggested for a study of products and industries.

Some of the larger technical schools in the West Riding have instituted lectures on commercial subjects, *e.g.* law, economics, principles of commerce, banking and currency, and products and industries. These are termed "special courses," and they are designed primarily for those who have been through the evening courses. Also supplementary to the evening instruction are "modern language circles," giving lectures in the languages which have been studied. The lectures are followed by debates, conversation classes, etc. Such circles are reported as having weekly meetings, the sessions of which continue for two hours.

To give effect to the provisions above described the West Riding Council has provided "teachers' training courses," conducted by experts. These courses are for teachers of modern languages and those who teach general commercial subjects. For the former the work extends over two years and consists of two parts: a Saturday training course and a summer vacation course of one month's duration, in either France or Germany.

For teachers who are well grounded in the principles of the commercial subjects two courses are given, each consisting of twenty-five lessons; for those not so well grounded a third course of twenty-five lessons is provided. The general provision for teachers' courses is for the County Council to pay three-fourths of the fee, and the traveling expenses above the first three miles. For the vacation course in France or Germany an allowance of forty dollars is made. These teachers' courses have grown steadily in favor, and their influence has been important in furnishing commercial education of the right sort in the West Riding of Yorkshire.[1]

Yorkshire Association. — An Association for the Promotion of Commercial Education was formed at Leeds in 1899. Of this Mr. James Graham, inspector for commercial education in the West Riding of Yorkshire, has been the prime mover. The objects of the Association are twofold: (1) to arrange for lectures on commercial subjects of common interest to the business men and the teachers of Yorkshire; (2) to discuss methods of teaching and other matters of interest to teachers, and to promote social intercourse among teachers of modern languages, commercial subjects, and science. Membership in this Association is restricted to those interested in commercial education. By its plan of organization the Association holds at least four meetings a year; one of these is the annual meeting. In addition to the local interest in the

[1] "The Yorkshire Experiment," in Hooper and Graham, *Commercial Education at Home and Abroad*, pp. 163–180.

meetings of the Yorkshire Association, the annual publication of a pamphlet with a summary of its discussions, and a report of its work, has made it of wider interest.

The English Continuation School. — The evening continuation school in England offers an interesting development of one branch of commercial instruction. Beginning with 1893 with what is known as Ackland's Code there was a new interest in this form of school. More advanced subjects were introduced, and since then the continuation school has been more liberally regarded. The education department, in its regulations, has given recognition to the school, and a new edition of its code appeared in 1899; by these regulations the continuation school occupies a definite place in English education. In the new code the detailed schemes give prominence to five groups of subjects of a narrower commercial character, as well as others of more general nature. The continuation schools have increased very rapidly in number and also in the enrollment of students. In the main, students of these schools are employed during the day, and they fairly correspond to night schools of boards of public education in the United States. Among the subjects presented in the code of regulations are commercial arithmetic, bookkeeping, commercial geography, commercial history, commercial correspondence, and office routine.

Commercial arithmetic is divided into three parts, as follows: first, elementary, in which are short methods of computation, interest and discount problems, mental arithmetic, averages, commission, brokerage, areas and

quantities, the metric system, and the coinage of France; second, the intermediate stage, dealing with stocks and shares, profit and loss, bills receivable and payable, with their interest and discounts, the use of logarithms, particularly for problems of compound interest, insurance and annuities, the more important European weights and measures other than the metric, the coinage of Germany and the United States, and the weights, measures, and coinage of India; and third, the advanced stage, in which two courses are open to the student. First, freights, with bills of lading, harbor, and other dues; rates of exchange in transactions with home and foreign bills; coinage of other European countries, and of China and Japan; or, second, debentures, preferred stock, ordinary stock, profits and dividends; liabilities, solvency and liquidation, banker's interest, calculation of rates and taxes, and compound interest with special reference to the repayment of loans.

The full course of the continuation school in bookkeeping includes instruction in three stages,—elementary, intermediate, and advanced. Preparatory to the elementary work, it is expected that a student shall have a satisfactory grounding in commercial and mental arithmetic. In the elementary stage there is taught a double entry system with simple accounts, necessitating the use of sales book, cash book, journal, and ledger. The student is trained in the making of invoice statements, the writing of checks, and is given the ability to deal with simple sets of accounts. In the intermediate stage he is taught to open and keep the following books: journal, purchase

day book, sales day book, returns book (inward and outward), cash book, petty cash book, bill book, and ledger. In connection with these books instruction is given in stock-taking, trial balance, balance sheet, etc., in the analyzing and summarizing of subsidiary books, and the use of more narrowly specialized terms, such as assignment, royalties, free on board, bonded goods, underwriter, average, clearing a vessel, vendue, script, etc. Instruction is given in the writing out of common forms of consignment notes, bills, credit slips, and in the making of entries for outgoing and incoming consignments. In the advanced stage there is considered the nature of capital, whether as money or property, stocks, shares, classification of capital, revenue accounts, the use of a private ledger, also the establishment and management of sinking funds, investment accounts, public, railway, and municipal accounts. Instruction is given, involving transactions by consignments, dishonored bills and bad debts; partnership is treated, and the division made of profits or losses; the nature and purposes of allowances to be made for depreciation in value of property is also made clear.

Preceding the course in commercial geography there is a study of the physical features of the earth's crust, the variations in climate, animal and vegetable life, etc. Commercial geography is presented as dealing with the geographical distribution of commodities, chiefly food, with raw and manufactured products, and with the various aids and hindrances to trade. This course is in turn divided into three stages, — elementary, interme-

diate, and advanced. In the elementary stage the subject of study is mainly the British Isles and their means of transit to the most important countries of the world. In the intermediate stage one British colony and one foreign country are studied, while in the advanced stage some one branch of British trade is thoroughly investigated along the lines of production of the raw material, its distribution and conveyance, markets, manufacture, markets for finished products, duties and tariffs, competition of other countries, etc.

In commercial history there are three stages as above, and the basis of each is a division according to time: first, when trade was carried on by land or entirely by means of rivers; second, when men began to make use of the narrow seas, like the Mediterranean; and, third, when commerce became world-wide in its extent. In the first period examples are taken from Oriental history, the civilizations of the Nile and Mesopotamian valleys, and in modern times from the river valleys of China, the rivers of Africa, and the inland rivers of North America — such as the St. Lawrence and the Mississippi. In the second period the river commerce is shown to be continued, but other means of communication connect the great river systems, and the inland sea is made a highway of trade. The relation of England to this form of commerce is pointed out, also the influence of the Norman Conquest in opening up England to the continent. Following this there is a study of mediæval England, — a producer of raw materials rather than a manufacturing country, and

an account of the products and staples of trade, the rise of trade guilds, the introduction of bankers, the enactment of English commercial legislation, the influence of great wars, and the beginning of the English navy. In the third stage there is traced the rise of modern commerce, following the growth of geographical discovery. In this period commerce becomes oceanic, and the course of trade is diverted. England participates in the benefits of the new discoveries; there is also an account of the rise of Holland, with a statement of the struggle between the English and the Dutch, with the various navigation acts, the foundation of the first English colonies, the development of the East India Company, and the establishment of the Bank of England. This is followed with a study of the commercial expansion of England in the eighteenth and nineteenth centuries.

Commercial correspondence and office routine has a two-year course. The first is designed to furnish the details which are expected of those who enter upon the minor duties of business life. The second year's course is planned for junior clerks and those engaged in subordinate positions in offices, warehouses, etc. The first year's course deals with such questions as the answering of advertisements, letter copying, folding letters, addressing envelopes, registration and insurance of letters, indexing, telegrams, telephone messages, forwarding goods, remitting money, various forms of receipts, also a thorough course in business correspondence, treating differences between private and official letters, various

parts of a letter, and the abbreviations made use of in correspondence. In the second year's course attention is given to the preparation of invoices, sales accounts, with their discount and interest calculations, the making up of price lists; advanced instruction is also given in railway rates and cable systems, the use of warehouse books, bank deposit and current accounts pass books, the market reports, shipment of merchandise, advanced business correspondence, preparation of circulars, pamphlets, and advertisements, compilation of catalogues, correction of printers' errors and proofs, the routine of printing, and a study of various forms of insurance.

Pitman Metropolitan School. — One of the older institutions for commercial education in Great Britain is the great practical school under the control of the Pitmans. This is an enterprise conducted for gain, and of the sort termed by Sir H. Trueman Wood as "private adventure schools." The Pitman School was founded in 1870 for the teaching of shorthand; its scope has broadened until it now gives instruction in shorthand and typewriting, bookkeeping, business methods, arithmetic, penmanship, English grammar and composition, commercial correspondence, commercial law, commercial geography, science, German, French, and Spanish. From forty students the school has grown to a membership of fifteen hundred in its day classes. Instruction at the Pitman School is practical, and in the main this school corresponds to the private business schools and academies in the United States. Pitman students are successful in the

examinations given by the London Chamber of Commerce and the Society of Arts. For the years 1898, 1899, and 1900 students of this school secured in competition a traveling scholarship for proficiency in foreign languages, given through the London Chamber of Commerce.

Secondary Commercial Education. — England has no well-organized national system of secondary education. Her secondary schools are mainly private institutions, and they have given themselves to grounding boys in classics and mathematics preparatory to competition for university honors in these subjects. Chambers of Commerce and other bodies of practical men have felt the disability under which England suffers from failure to furnish secondary education, modern in character, and they have repeatedly put themselves on record as favoring an entirely new sort of secondary teaching. A distinguished former president of the London Chamber of Commerce set it down as the function of such a chamber to be the eyes and ears of commerce, and acting in that capacity the London Chamber saw that the commerce of Great Britain would languish unless the youth of the realm were taught the mother tongue, modern languages, science, geography, and the organization and conduct of trade. One may judge from numerous expressions of educators and men of affairs that the "burning" educational question in England is not the reform of elementary education, nor of the education of colleges and universities, but changing the character of secondary school instruction.

The London Chamber of Commerce and the Technical

Education Board of the London County Council have long favored modern secondary schools, and their example is followed by commercial bodies in Halifax, Liverpool, Manchester, Edinburgh, and many other cities. Secondary schools with technical and commercial elements have been established in various places; but the experiment that comes nearest to the secondary school of commerce as it is known in the United States is in the University College School in London. This institution was chosen by the London County Council as the day school in which they would introduce the experiment of advanced secondary commercial education. The Technical Education Board made a contribution to the expense of the work, but reserved the right to name a certain number of boys to scholarship privileges. Mr. A. Kahn, who had formerly won a traveling scholarship and investigated commercial education on the continent, was put in charge of the new work. Mr. Kahn believes in a strong emphasis on the modern languages in a secondary commercial school, and he has made the London University School an expression of that idea.[1]

Admission to the department above mentioned is by examination, which must show that the applicant can pass the Cambridge or Oxford local senior examination or the junior examination with honor, or the London University matriculation examination. It is required that at least one modern language must be included among the sub-

[1] See Kahn, "Commercial Education in Secondary Schools," *London Educational Times*, May, 1900.

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE,
CLARE MARKET, W.C.

jects offered. Work was at first projected for three years, it being expected that boys would enter at fifteen and continue in attendance until eighteen. The aims of the School are twofold: (1) to prepare for higher commercial life. It is suggested that students might get a finish to their education by travel on the continent. (2) To prepare for studies in commerce and industry at higher schools of commerce.

The curriculum for two years is furnished below.[1] At the end of the second year it is expected that students will present themselves for an examination conducted by the Technical Education Board of the County Council. The complete examination given in this School in 1902 is furnished on pages 334 to 344. Special advanced studies are offered for those who wish to continue a third year.

London School of Economics and Political Science. — In 1894 a committee of the British Association reported that the opportunities for the study of economics at British universities were very unsatisfactory as compared with opportunities for such study in the United States and continental countries. Following that report there was evolved the idea of a London school of

[1] *Required Subjects.* First year: English Literature and Composition, History, Geography, Mathematics, Commercial Arithmetic, Bookkeeping. Second year: English Literature and Composition, Economic History, Geography, Economics, Commercial Science, Commercial Arithmetic, Bookkeeping.

Two of the following languages: French, German, Spanish, Latin.

Optional Subjects. Higher Mathematics, Physics, Chemistry, Drawing, Shorthand, Typewriting.

advanced economic studies, in which higher commercial education was to have a place. A provisional plan was offered toward the close of 1894, followed in 1895 with the actual organization of the school and the beginning of its work. From the first the plan has been to consider commerce as a liberal profession, and the subjects of study have been treated accordingly.

Two of the four enumerated objects of the School are as follows: (1) to organize, promote, and supply liberal courses of education specially adapted to the needs of persons who are, or who intend to be, engaged in any kind of administration, including the service of the government or local authority, railways and shipping, banking and insurance, international trade, and any of the higher branches of commerce and industry, and also the profession of teaching any such subjects; and (2) to give technical education within the meaning of the Technical Instruction Acts, 1889 and 1891, and any acts amending the same; and, in particular, to organize, supply, promote, and assist in any way whatsoever those subjects of technical education comprised under the term "higher commercial education."

The School continued on an independent basis from 1895 to 1900, supported by fees, bequests, and liberal grants from the Technical Education Board of the London County Council. Lecture halls were secured in the earlier period from the Society of Arts and the Chamber of Commerce. The University of London had promised repeatedly to furnish some form of higher commercial

education, and as the work in the School of Economics and Political Science had been of so high an order it was admitted into the University in 1900; the title given was "Faculty of Economics and Political Science, including Commerce and Industry." The regular courses in the School now lead to the degrees of B.Sc. and D.Sc. The last good fortune of the School was the gift of a site for a building by the London County Council and of the funds for its erection by numerous persons interested. The corner stone of this building was laid in 1900, and it was completed and formally opened in 1902. The ceremony of installing the work in the new building was conducted by the Earl of Rosebery, a former president of the School and at present on its board of governors. It is worthy of note that the late Bishop Mandell Creighton also served as president of this School; the incumbent of that office in 1903 was Lord Rothschild.

The London School offers highly specialized instruction in a wide range of subjects, and (1904) it may fairly be termed the leader among the institutions giving commercial education in Great Britain. An important feature of the School's activity has been the collection of a special library. A fund of $12,500 was secured by subscription as early as 1896, and from this time forward the library has been kept up by securing government documents and reports, both domestic and foreign, also the standard publications along the lines of the School's work. The purpose of this library was that research work might be carried on in the School; that the results of

this might be known, a series of publications was projected. A goodly array of work already appears in this series.

The program of studies in the London School is too extensive to be reproduced. In brief, the plan is to begin with concrete and descriptive matters in history, geography, and commercial organization. These studies lead to the theoretical treatment of the same subjects, and finally to the third stage, in which is the application of the pure theory to special studies in banking, insurance, international trade, etc.

Over two thousand students have been in attendance on this School since it was opened. Later years have shown a marked increase of attendance. Students are rarely below twenty years of age; some few are above thirty; but the majority are between twenty-three and thirty. One-half the matriculates look to engaging in commercial life; about one-eighth expect to go into the public service; and one-tenth are preparing for careers as lecturers or teachers. Students are drawn from different parts of the British Empire and various foreign countries; from ten to fifteen per cent of them are foreigners.

Liverpool School of Commerce. — Another indirect result of the London Chamber of Commerce conference was the establishment of the School of Commerce in Liverpool. This School was not intended to deal with elementary subjects. Rather, it was established on a broad gauge plan similar to that of the London School of Economics; its aim was to afford "training of the most practical and business-like character, well up to date, and capable of

direct application to the commerce and trade of the city." The assumption was that students who came would have had a sound general education, including an elementary knowledge of such subjects as bookkeeping, shorthand, and commercial arithmetic. The course was fixed for two years, and the curriculum laid down was as follows: —

Subjects	Hours per Week	
	First Year	Second Year
Modern Languages (French, German, Spanish):		
One Modern Language	4	4
Second Language	4	4
Contemporary History	2	—
Commercial History	—	1
Commercial Geography	2	1
Mathematics or Science	3	3
Economics	—	2
Commercial Law	—	2
Commercial Bureau:		
Commercial Theory Commercial Practice Commercial Mathematics Bookkeeping English and Foreign Correspondence	8	8
	23	25

The numbers responding for the course above laid out were not so large as was anticipated. Two other departments of work have been added: (1) afternoon classes in German, French, and Spanish; and (2) evening continuation classes in modern languages and technical business subjects. The afternoon classes are both elemen-

tary and advanced; they are designed primarily for those engaged in business, and the teaching of the languages is largely by the conversational method. There seems little to distinguish the work of the continuation classes in the Liverpool School of Commerce from that done under the supervision of the London Chamber of Commerce, and in the continuation schools under the Board of Education. If anything, there seems to be a larger use of the lecture method at Liverpool.

The control of the Liverpool School is by a joint committee representing the Liverpool Chamber of Commerce, the University College, and the technical instruction committee of the City Council. Its support is in part from grants by the Liverpool City Councils, the County Councils of Lancashire, students' fees, and contributions from individuals and firms interested in the School's success. The Liverpool School has not been given the recognition and support necessary to the success of an educational enterprise. P. E. J. Hemelryk, vice-president of the Chamber of Commerce, who has been the chief factor in such progress as has been made, in a late communication to the technical instruction committee asked for additional funds, with a separate building on an independent establishment. Existing diversity of the aims of the School would be fatal to the development of commercial education, he says, even though funds were available. No doubt the ideal set by Mr. Hemelryk will yet be realized in the "most purely commercial city, in the most commercial country, of Europe."

The Owens College and Manchester University. — During 1903 the old Victoria University, including colleges in Liverpool, Manchester, and Yorkshire, was dissolved, and in its place, movements were begun for three independent universities. The *London Magazine of Commerce* predicted (May, 1903) that at Liverpool the development would be most along commercial lines and at Manchester most in the direction of manufacture. The Owens College, formerly a college of Victoria University, has under the new arrangement become the college of Manchester University.

Higher education designed for those looking to business life was inaugurated at the Owens College in 1900. The Manchester Chamber of Commerce and others interested acted in conjunction with the council of the college. They set up a two-year scheme of commercial studies of an advanced character, for which a leaving certificate was granted. The minimum work for which the certificate was offered was eleven hours per week for the two years. Subjects of study were: modern languages, including commercial correspondence, geography, law, political economy, science, and English literature and composition. A goodly number of firms in Manchester agreed to give recognition to the work by taking the leaving certificate into account in making appointments. A certificate has also been given for certain commercial work carried on in the evenings at the Owens College.

There has also been a marked liberalizing of the requirements for the B.A. degree at the College, so that since 1902 several subjects that are of practical commercial

value, such as the modern languages and different branches of geography and economics, may be included in meeting the demands for this degree.

The promoters of commercial education in Manchester were not content to rest on what had been done at the Owens College. During the spring of 1903 a representative committee of the Chamber of Commerce and other citizens of Manchester undertook to have assured for a term of years from $7500 to $15,000 a year for higher commercial education; this amount was asked for to provide for a faculty of commerce in the new University of Manchester. It was proposed to lengthen the period of study and increase the number of subjects. Sufficient funds were pledged to put the work on quite a different basis in October of 1903. A faculty of commerce was organized and a movement inaugurated to fix the requirements for the degrees of Bachelor of Commerce and Master of Commerce.

The Yorkshire College. — Yorkshire College at Leeds has followed the example of the Owens College and other English institutions in giving advanced training in commercial subjects. A certificate scheme with a two-years program of studies was begun in 1902–1903. This was supported in part by the County and City Councils and in part by the Chambers of Commerce in Yorkshire. Studies are to be pursued for two years, and on their completion a certificate is furnished. The curriculum at Yorkshire College is quite similar to those at Liverpool and the Owens College, but with this difference: there is less attention to

foreign languages, and an opportunity is given to study engineering and textile operations.

Most of the higher schools of commerce in England have had difficulty in getting students for their day courses. Yorkshire College meets this by recognizing that its students of commerce should spend a part of each day in "the office, the mill, or the works." The studies are, therefore, mainly in the afternoons. The announcement of the College puts it forth as a theoretical principle that the most satisfactory method of combining theoretical studies and practical work will be for students to go into actual business as above noted and during the vacation periods.

University of Birmingham. — Among the newer movements for higher commercial education in England, that at Birmingham should be given a prominent place. A faculty of commerce has been provided and a curriculum laid out covering three years. A degree in commerce (Bachelor of Commerce) is offered to those who shall satisfactorily complete the curriculum. This work is under the direction of Professor Ashley, a former fellow at Oxford and later a professor at Harvard University. In the preliminary announcement studies were divided into four groups: (1) languages and history, (2) accounting, (3) applied science and business technique, and (4) commerce. The director announced it as his aim to make the fourth the most distinctive.[1]

The Birmingham Chamber of Commerce has been

[1] *Purpose and Programme*, p. 7.

active in securing the new department in their University. The Chamber recommended a curriculum that it would like to have adopted, and suggested standards it thought ought to be reached by those leaving school at different times of life. As the arrangements were finally made, students are admitted to the faculty of commerce on passing the matriculation examination of the University in English, mathematics, one of the prescribed languages, either a science or another language, and a fifth subject. Every candidate for a degree in commerce must pass in four subjects or groups of subjects before he is allowed to present himself for the next university examination. These subjects are English language, literature, and history; two languages selected from French, German, Italian, Spanish, and Latin; mathematics; and one science chosen from mechanics, chemistry, and physiography. Considerable technical work in economics, commerce, geography, and accounting is offered supplementary to the studies previously mentioned.[1]

This new faculty at Birmingham is a good illustration of a departure from the conventional idea of the English university. In his *North American Review* article, Professor Ashley called attention to the desirability of varying the fixed ideal of universities both in Great Britain and the United States, and contrasted them with German institutions of similar grade, particularly in the teaching of economics. He announced it as the aim of the Birmingham experiment to supplement, rather than oppose,

[1] *Curriculum and Regulations*, pp. 2–9.

the work of the older universities. Professor Ashley is a good illustration of the results from the departure. He was widely and favorably known as a theoretical and historical economist, but no one associated his work with practical affairs. One comment on his appointment was that he had never brought a problem nearer than one hundred years. But within two years his Oxford lectures on the "Adjustment of Wages" have taken rank as a valuable practical discussion of the coal and iron industries both in the United States and Great Britain.[1]

The Mosely Commissions. — Trades-unionism has been regarded in some quarters as a great ill from which England's industry and commerce are suffering.[2] Granting that this be true, it is but one remove from education. In order to furnish an object lesson to English workmen, Mr. Alfred Mosely brought representatives of trades-unions to the United States for a tour of inspection. The first three of twenty-nine questions submitted to the delegates to be answered, indicate what was in Mr. Mosely's mind: (1) Is the American lad better equipped by early training and education for his work than the English lad? (2) If yes, what changes would you suggest in the English system of education for the working classes? (3) Have you any suggestions to make with regard to evening continuation classes and technical education for men at work during the day?

[1] Longmans, Green and Co., 1903.

[2] For example, the speeches of the Earl of Rosebery, and in *American Engineering Competition*; also "Labor Unions and British Industry," *Bulletin Bureau of Labor*, January, 1904.

The first Mosely Commission agreed unanimously that America is superior to England in at least five particulars: (1) the education of the people; (2) superior intelligence and enterprise of employers; (3) closer coöperation between employers and workmen; (4) superior morality of American workmen; and (5) greater readiness of Americans to use labor-saving machinery. Mr. Mosely's personal conclusion from the first visit was: "If we are to hold our own in the commerce of the world, both masters and men must be up and doing. Old methods must be dropped, old machinery abandoned. Practical education of the masses must be instituted and carried out on a logical basis."

The philanthropist who brought the Commission above noted says that before he reached home he saw that he was under the necessity of bringing a new group of men to inspect education in the United States. In 1903 a delegation was secured representative of educational bodies in Great Britain and Ireland. This Second Commission was made up of men of conspicuous ability, members of Parliament, and those high in administrative positions. Several weeks were spent in an examination into American educational methods, particularly in secondary, higher, and technical schools. The report of this Commission, just published, is on the whole highly favorable to American education, and will prove of interest to both Englishmen and Americans.

Relations with the Government. — Recently Sir M. Hicks-Beach, in an address at the distribution of prizes gained under the London Chamber of Commerce examinations,

voiced the opinion that commercial education might well become a part of the whole system of public instruction in England. From many quarters there are evidences of a new regard for commerce in that old country. There is now constituted a new Commercial Committee of the House of Commons to supplement the work of the Board of Trade and the Foreign Office. The establishment of a Department of Commerce and Labor in the government at Washington is not without its effect on the British government. In the Commons, in 1903, a resolution was introduced as follows: "That the constitution of the Board of Trade has become obsolete, and this house is of the opinion that a department presided over by a Minister of Commerce and Industry, having a *status* of a Principal Secretary of State, should be substituted for the present office." The foregoing was received with favor both in the Parliament and on the outside. The only question was of the proper procedure in getting an organization. The matter was left in the hands of the Government for investigation. Two things about which the English public is becoming aroused are the commercial future of the Empire and the system of education, and it is coming to be felt that these are inseparably connected. It would seem (1904) that the public is more interested in these matters than is the Government; but if this be true, under the English system the Government will ultimately be made answerable to public opinion.

The Outlook. — The preceding account indicates a healthy interest in educational reform in England; it also records substantial progress in many directions, but the end

is not yet. Indeed, what has been done is little more than a beginning. At the annual meeting of the Associated Chambers of Commerce in 1902, the continued comparative neglect of science and modern languages in the great public schools was noted with regret. The chambers in this Association, one hundred and fifteen in number, are most active in their respective communities. But the inertia of the English public is not easily overcome. Recently that superb educational leader, Michael E. Sadler, made a valuable report on higher and secondary education in the city of Sheffield. This not only analyzes existing education, but makes recommendations for the future and furnishes the reasons therefor. This report may be taken as pointing the way; in the matter of educational reform it but follows the report of the Royal Commission on Secondary Education and other expert opinion. Sweeping reforms have generally been opposed in England. To clear the ground for the erection of a new educational structure, "symmetrical and complete," means loss. English educational reformers are wisely trying to modernize their system of education without doing too great violence to it. As the *Magazine of Commerce* puts it, the real remedy in England is not to pile university on university, and school on school, but it is to modify existing universities and schools. Even Oxford and Cambridge show signs of the changes coming over English education, and the latter has made it possible to take the ordinary B.A. degree in economics. Much has already been done for commercial education in England. Much remains yet to do.

CHAPTER VI

Private Commercial Schools in the United States

Beginnings of Business Education in the United States.— The private commercial school offers a somewhat vague and complex subject for study; the facts when found are difficult of explanation. Though the origin of this school is of comparatively recent date, the place and time of its rise are disputed, for in its early period it left little or no formal history; the increase of these schools at a later time has been so rapid as quite to confuse one with the material available for study. Partisanship of private school men on the one hand, and prejudice against private commercial schools on the other, have but added to the difficulties of giving a satisfactory treatment to this subject. The writer has tried to learn of these schools at first hand; he has visited them and made the acquaintance of their managers and teachers; he has attended conventions and carried on an active correspondence, as well as studied the catalogues and professional magazines devoted to the interests of these schools. For the historical part of the present chapter he gratefully acknowledges many favors from what has

come to be known as the "Old Guard" among commercial teachers.[1]

The private commercial school is perhaps the best illustration of the fundamental thesis to that remarkable series of essays presented by the state of New York at the Paris Exposition, viz., *Spontaneity is the Keynote of American Education.* The birth of the business college was not heralded; we do not know how or when it began. Like the inimitable Topsy, it just grew!

It has generally been felt by business college people that the man who originated this form of instruction in the United States was R. M. Bartlett, first of Philadelphia, later of Pittsburg, and finally of Cincinnati. This claim has been disputed by those who hold that Peter Duff of Pittsburg, or George N. Comer of Boston, or Jonathan Jones of St. Louis, antedated Bartlett. A careful study by Mr. Edgar M. Barber makes one hesitate before pronouncing either of the preceding as the pioneer. James Gordon Bennett seems to have conducted a school in New York before Bartlett's first venture.[2] Mr. Williams

[1] Among those to whom acknowledgments are due are Robert C. Spencer of Milwaukee, for valuable data; to the late Mrs. Packard, for the privilege of using the manuscript papers and library of Silas S. Packard; also to Messrs. L. L. Williams of Rochester, W. H. Sadler of Baltimore, and H. W. Ellsworth of New York for documents and manuscripts, as well as other information secured by correspondence and interview.

[2] Mr. Barber's paper was read before the Eastern Commercial Teachers' Association in 1903, and later appeared in the *Business Educator.* He cites the following announcement which appeared in October of 1824: "The subscriber, encouraged by several gentlemen, intends opening in Ann, near Nassau Street, an English classical and mathematical school for the instruction of

holds that Duff, Comer, and Jones were in the earlier periods giving private instruction. The probable facts are that the spirit of the technical business school of this country can be traced back to R. M. Bartlett, and that there has been a continuous development of this institution from his crude beginnings.

It seems probable that Bartlett began his first school for the teaching of penmanship, bookkeeping, and commercial arithmetic at Philadelphia in 1834. After one year's experience he went to Pittsburg, where he carried on a school for six or seven years, after which he followed the tide of Western migration to Cincinnati. The school which he founded in the latter city is still continued by his son. The authority for the preceding statements gives warrant for the further facts that Duff began a school in Pittsburg in 1839, Comer in Boston and Jones

young gentlemen intended for mercantile pursuits. Instruction will be given in the following branches: —

"Reading, elocution, penmanship, and arithmetic; algebra, astronomy, history, and geography; moral philosophy, commercial law, and political economy; English grammar and composition; and, also, if required, the French and Spanish languages by natives of these countries.

"Bookkeeping and merchants' accounts will be taught in the most approved and scientific forms.

"The school will be conducted, in all the principal branches, according to the inductive method of instruction, and particularly so in arithmetic, geography, and English grammar.

"It will commence about the first of November.

"References: J. S. Bartlett, M.D., Albion Office; Messrs. Smith and Hyslop, Pearl Street; Mr. Henry T. Margarey, Broadway; Mr. P. Whitin, Jr., Maiden Lane. J. GORDON BENNETT.

"N.B. — Application may be made to J. G. B. at 148 Fulton Street."

in St. Louis in 1840.[1] Duff was given an act of incorporation and perpetual charter by the state of Pennsylvania. His school was popular.

Bartlett's statement of his own experience is perhaps the best explanation of the rise of the business college. He says that when he became of age he wished to know more of bookkeeping, but could find no instruction. He offered to enter business houses and learn, but was told that proprietors did not want to be bothered. The predicament in which he was placed was of not being taken into an office unless he knew bookkeeping, and yet having no place to go and learn. This condition he determined to correct. He went to New York and later came to Philadelphia, where he opened his first school in 1834.[2] From this time Bartlett devoted his life to furnishing in school what would serve as a sort of substitute for apprenticeship in commercial work.

Three years after the opening of Bartlett's school in Cincinnati, Silas S. Packard began the life of a commercial teacher as an itinerant penman. He said that he practiced penmanship assiduously and traveled and taught in various parts of Ohio and Kentucky. It was his custom to go into a town, display his specimens, and organize a class.

[1] Williams MS. Hinman, in *Business Education*, 1903, states that Bartlett, Duff, and Comer all began their schools in 1840. Dolbear is credited by the National Bureau of Education with having organized a commercial school in New York in 1835. See Crissy, *Evolution of Business Training*, N.E.A. Proceedings, 1899.

[2] Mr. Barber points out that Bennett's school was in operation in New York at this time.

After a brief term he would move on to a new field. This was the practice of Platt R. Spencer, whose name was taken for the Spencerian system of penmanship, his pupil, H. D. Stratton, and many others. Up to the late forties the quill pen was in common use, but about that time steel pens began to be substituted. The latter made possible a new kind of work. It is not too much to say that Spencer reduced the instruction in penmanship to a science; before his time it was termed a mere imitative art. About the middle of the nineteenth century a "semi-angular" form of writing, with a combination of forearm and finger movement, began to be common. The old method of producing writing was by measurement, which gave mechanical exactness, but did not give encouragement to learners. The free movement work of Platt R. Spencer began a new era. The differences were most marked in the making of capitals. The photographic reproduction of pen work has made possible marvelous advances in the teaching of penmanship. Spencer was termed by Mr. Packard the greatest writing master of his age. His work was continued by his sons and nephew, and the family has made the name an honored one in the annals of commercial education.

Penmanship work was practical, and lent itself naturally to the spectacular. Contests and public exhibitions were common, and the early school proprietors made use of these show occasions to get additional scholars. No doubt schools sometimes grew out of penmanship classes. In 1848, Packard was called to Bartlett's school in Cincinnati;

already these business schools had begun to take more definite form.

Bryant and Stratton. — H. B. Bryant and H. D. Stratton were both students of the Folsom Business College at Cleveland. In 1853 these two men formed a partnership with James W. Lusk, the Spencerian representative in northern Ohio, and together they established in Cleveland the first Bryant and Stratton College. From this on the Bryant and Stratton schools increased rapidly. In the main, they were established in cities where other schools were in existence. Proprietors of the other schools were either required to sell out at a sacrifice or the attempt was made by competition to force them out of the field. Those who knew Mr. Stratton characterized him as a man of indomitable energy; it was his ambition to put one of their schools into every city of the United States with a population of ten thousand or above. In brief, the plan was to secure young men who had the requisite qualities and establish them as local partners. These men were given a percentage of the net profits from the schools of which they had charge. Though the percentage varied with the different local proprietors, they seem usually to have had from thirty to fifty per cent. The Bryant and Stratton schools were organized in what was known as a "chain." Uniform text-books and interchangeable scholarships were features. The number of schools increased until they reached fifty or more. Some of the best known of the business men became local partners of Bryant and Stratton. S. S. Packard opened a school for them in New

H. B. BRYANT.

H. D. STRATTON.

Harper's Weekly, 1866.

York in 1857; this was seventh in the order of their "links"; Robert C. Spencer went to Chicago as their representative in 1856 and later opened one of their schools in Milwaukee; L. L. Williams became their local partner in Rochester, as did W. H. Sadler in Baltimore.

These schools gave instruction in penmanship, bookkeeping, and commercial arithmetic and commercial law. When Bartlett wished to know more of bookkeeping, he was told to study Jackson's text. This, he said, he already knew by heart. An edition of Jackson's Bookkeeping was published in New York in 1804 and another in 1811. This was termed "bookkeeping in the true Italian form of debtor and creditor by way of double entry." Practical bookkeeping and Italian bookkeeping were held as synonymous. James Bennett of New York published an early work on bookkeeping that had sold to the twenty-first edition in 1842.[1] Peter Duff's work on bookkeeping was more famous than his school. It had gone to its twentieth edition in 1868. Many of the early books were in manuscript, and instruction was by dictation. There was always danger of pirating these manuscripts by those who had gotten instruction from them, and this was sometimes practiced. S. S. Packard collected a considerable library of British, French, and American books, and made them the basis of the Bryant and Stratton bookkeeping, and later of a work on commercial arithmetic. One can but be struck by the similarity of many of our present text-books on bookkeeping with these early models.

[1] Barber, *Business Educator*, May, 1903.

It was no warrant when a book was published that it would not be pirated. In Mr. Packard's library is a *Students' Handbook of —— College*, with the following note: "Paragraphs marked thus ')' are copied verbatim from the *Packard Commercial Arithmetic;* paragraphs marked thus '))' are similar to those in the Packard, the figures only having been changed in many cases." Many paragraphs were found with the markings indicated.

Associations of Commercial Teachers and End of the Bryant and Stratton System. — In 1863 and 1864, Bryant and Stratton called in New York the first convention of local partners. This is termed by Packard and Sadler the fatal mistake of these leaders. Their contracts had already been a source of dissatisfaction; and when the men from the different cities got together, their grievances were much magnified. The chain might have been broken at once had it not been for the personal power of Mr. Stratton. As it was, the local proprietors were persuaded to go back and take up their work. But the seeds of dissatisfaction were sown, and in three years' time there was the disintegration of the Bryant and Stratton organization and the formation of a new association. Mr. Stratton, however, organized a very important meeting in Chicago in 1865. James A. Garfield and other well-known men appeared before this convention, and its sessions were widely noted in the press. But perhaps the most important of the Bryant and Stratton conventions was that held in Cleveland in July, 1866. Men representing the chief cities in the United States and Canada were in attendance. Among

S. S. PACKARD.

W. P. SPENCER.

L. L. WILLIAMS.

W. H. SADLER.

Harper's Weekly, 1866.

those noted were Messrs. Bryant and Stratton, W. P. Spencer, S. S. Packard, L. L. Williams, and W. H. Sadler. *Harper's Weekly* for October 13 following gave a brief article on the Bryant and Stratton work, with the pictures of fifty men who were at the Cleveland convention. Public interest in the work was referred to as strong; the success of the business college idea was termed "unprecedented." It was the declared purpose of the association to combine the best talent in perfecting the system of business education. The *Weekly* continued, "Through individual institutions and admirable text-books the sphere and limit of business education have been as clearly defined as those of law, medical, and theological schools." It was said to be almost as necessary that a young man fitting for business should take the course in one of these schools as it was that one for professional honors should attend an institution especially preparing for his work.

Bryant and Stratton now determined to monopolize commercial education and crush all competitors. They formed a perpetual partnership which was to extend to their executors. But already the forces were at work which were to destroy the chain. Letters of protest against the whole arrangement began to be circulated. One of these was signed by R. C. and P. R. Spencer, with six others of the local proprietors. The statement of the situation in this letter was as follows: "First, then, we have the colleges, taken collectively, forming the co-operative family of schools, covering the vast extent of country embraced by the United States and Canada, and

laboring to perform its legitimate functions to nearly or quite 40,000,000 people, who represent all the varied interests of an advanced and progressive civilization. Collectively, these schools form the main body of educational facilities specially adapted to commercial life through the instrumentality of collegiate instruction and training, and upon them rests the grave responsibility of providing for one of the vital educational wants of this business age." After reviewing the inception and growth of the commercial college, the letter passed on to a consideration of the prospects: "The time seems now at hand when this community of educational institutions should be liberated from the restraints and obligations of its childhood, and step forth into manhood, to think, act, and live in the atmosphere of freedom, for the higher and broader ends of its better, more vigorous and independent age. The consciousness of greater and better things is taking strong hold upon us, exciting new desires, while our fears, doubts, and sympathies are actively exercised in view of the changes incident to our growth, and the relations, rights, obligations, and ties inseparable therefrom. The time seems auspicious for adjusting ourselves for a higher order of collective and individual action, requiring organization better suited to our encouragement, independence, and greater strength." There was a sting of bitterness in a single sentence of the letter, "Already have our individual and collective efforts, in this noble enterprise, enriched its founders and conferred honor upon their names, while we remain in comparative obscurity and indi-

gence." This was followed, however, by professions of appreciation for the labors and services of the founders, and it was said that they might claim and receive credit with liberal reward; but it was asserted that the time had arrived for a new order of things which it was felt would be to the best good of all concerned. The writers professed their admiration for Mr. Stratton and their sympathy for him in his failing health; they questioned whether he would ever be physically able to carry on the colleges, and they were doubtful about the ability of Mr. Bryant to do so. The time seemed opportune to dissolve the partnerships, and a meeting was called in Cleveland for Christmas week, 1866. The meeting was held, and though Bryant and Stratton were invited to attend, they did not do so. There was now formed the National Union of Business Colleges, as a sort of rival to the International Association, a meeting of which had also been held in Cleveland in July of 1866.

The partnerships of Bryant and Stratton with Felton of Cleveland and Spencer of Milwaukee were dissolved. There was the beginning of what promised to be a general break-up of the system when Mr. Stratton's condition changed for the worse, and it was felt he would never be able again to direct the schools. It was his enthusiasm and personal qualities that held the chain together. Mr. Bryant did not know the field, and he would have been helpless in attempting to manage the project. Several of the local partners were called to New York before Stratton's death and the terms of sale agreed upon. The other

local partnerships were closed out by Mr. Bryant, and this notable work came to an end. An association of schools was continued, with provisions for a minimum rate of tuition and an interchange of scholarships. A modern survival of a series of schools conducted under one management is found in Illinois, where in 1903 Mr. G. W. Brown of Jacksonville conducted fifteen schools.

Scholarships. — The "perpetual scholarship" was a feature of the Bryant and Stratton schools. This idea had been originated by Bartlett of Cincinnati; its purpose was to secure attendance of persons for short periods in the intervals of their work. The scholarship was an inducement to students and seemed to work satisfactorily as long as the appeal was chiefly to those of advanced age who could give only a short time to school. In the Bryant and Stratton contract the scholarship was good for attendance upon any school in the chain, as well as unlimited in time. The usual price of such a scholarship was forty dollars. The plan was continued by the International Business College Association, but the best men in the country looked upon the arrangement as unbusinesslike; friction arose in the practical working out of the scholarship arrangements. Some of the poorer schools sold scholarships that were presented for tuition at the better schools. Mr. L. L. Williams credits H. E. Hibbard of Boston with being the first to stop selling the life scholarship. The matter came before the convention of the International Business College Association in Cincinnati in 1873. S. S. Packard introduced a resolution that the

Association should recognize an exact relation between money paid for tuition and the time for which tuition was given. In a strong speech Mr. Packard pointed out the evils of the scholarship arrangement, and said it was the purpose of the resolution to leave every school to fix its own charges. The speaker said he had abandoned the scholarship evil five years before. About 1870 another phase of the question had presented itself by younger persons buying scholarships and attending for much longer periods than the scholarship was originally intended to cover. It was natural, therefore, that the perpetual scholarship practice fell into disuse, about 1873.

Eastman Schools. — Among the pioneer business college proprietors were George W. Eastman and his nephew, H. G. Eastman. The former had a business school in Rochester, New York, during 1853–1854, where the latter attended as a student. From Rochester, H. G. Eastman went to Oswego, New York, and later to St. Louis, Missouri, in both of which places he conducted schools with indifferent success. In 1859 he transferred his scene of labor to Poughkeepsie, New York. He was the most daring advertiser of all the early managers, and before he reached Poughkeepsie began the policy that was to make his school successful. On his arrival he is said to have found a "bushel of letters" awaiting him. At times he became heavily involved from his advertising; but he had supreme confidence in his work and was able to inspire confidence in others. Mr. L. L. Williams reports that at times he would buy a whole page in the New York papers

at a cost of from $1500 to $3000. Mr. Eastman organized a full brass band which he used in various cities to gather crowds, after which the claims of his school would be presented in a stump speech, and advertising material distributed. Ornamental penmanship was similarly employed to interest people, after which they would be canvassed. Early in his career, H. W. Flickinger went to the Ohio state fair as Eastman's penman. Intense competition from the Bryant and Stratton schools forced Eastman to these methods. His greatest stroke, however, was in the display he made in the procession at Lincoln's second inaugural, and the distribution of what are claimed as a million circulars to the soldiers who were still in the field. When the armies were disbanded, men who wished to make the most of a new beginning remembered the Eastman propaganda, and H. G. Eastman's Business College was a pronounced success. H. W. Flickinger, long known as a masterful penman, was among those who entered at the Eastman school soon after being mustered out of the Union army. Those who knew Eastman characterize him as of strong personality and untiring energy. With Stratton and Packard he left his impress on early business education in this country.

Names of Private Schools. — While it is next to impossible to trace the earliest beginnings of the private business schools in America, it seems tolerably easy to fix upon the various names by which these schools have been known. "Commercial college" was first used by Bartlett in Cincinnati. Peter Duff called his school a

"merchant's college"; Gundry and Bacon used the name "mercantile college"; H. G. Eastman of Poughkeepsie was the first to adapt the term "business college." The use of the name "college" was natural. The proprietors wished to distinguish their schools from the traditional colleges, and yet furnish a suggestion of contrast. They sought students and wished to dignify their schools as much as possible. S. S. Packard says that he never liked the name "college," that he early urged upon other proprietors the general use of "school" or "institute."[1] Mr. L. L. Williams says that Mr. H. E. Hibbard of Boston was the first of the private school proprietors who had "the courage and the wisdom" to call his school a "school."[2]

The Regents of New York State have under statute exercised supervision over use of names in their state. Some control in this matter has been secured in other sections. One well-known instance was a restraining order from a court denying an ambitious proprietor the use of the name "university" for his school. But more important than the external supervision has been the sentiment among the business school proprietors themselves. Mr. Packard was given permission to continue the use of "business college" by the Regents of New York State, but he voluntarily relinquished it and substituted "Packard School." His example has been followed by the best of the business school proprietors in all parts of the country. It is to be hoped that others among

[1] Packard MSS. [2] Williams MS.

the managers of private business schools will give up the name "college," a name which as applied to their schools has long ceased to have any significance or render any service.

Shorthand and Typewriting. — A new aspect of commercial education was presented when the typewriter came into use. Shorthand writing was taught from about the middle of the nineteenth century; but it was taught as a science, or for professional rather than commercial purposes (see p. 215). Daniel T. Ames is reputed to have established a separate school for teaching shorthand at Syracuse, New York, in 1861. Interest was taken in the project at first, but conditions were not favorable, and soon the number of students decreased rapidly. About 1870, Mr. Packard turned his attention to the preparation of shorthand writers and typewriters. Typewriting machines were perfected and came into common use. The employment of the shorthand amanuensis has quite changed the methods of doing business in the last thirty years. Packard was a firm believer in the commercial education of women, and wished them to study shorthand. Early in the seventies he advertised in the *New York Tribune* that he would take thirty young women and educate them without charge, equipping them to make a better living than they could make without his education, and in an occupation no less respectable. Even with this offer he did not get the desired thirty; but he turned attention to shorthand work as a lucrative and honorable career for women. It is

probable that Mr. Packard did more than any other man to give the impulse to the education of stenographers.

Later Associations. — Conventions were held yearly after the dissolution of the Bryant and Stratton partnerships until 1873. Between 1873 and 1878 no meetings were held, but in the latter year the penmen held a meeting in New York. The next year there was a joint meeting of penmen and commercial teachers in Detroit, and from this on meetings were held annually. The earlier meetings were of thirty or forty proprietors of schools, but later, teachers began to attend.[1] The convention of 1890 met at Chautauqua, and this year marked the decline of the old organization. There began to be agitated the question of a connection with the National Educational Association. The first meeting in connection with the latter Association was at Saratoga in 1892; in 1893 the Business Education Section was first recognized as a department of the National Association. By degrees this section has been dominated by the interests of the commercial high schools, the higher schools of commerce, and normal schools, until it is given almost entirely to these interests. The Commercial Teachers' Federation was organized soon after the dissolution of the old association. At first its membership was mainly of Western teachers, but more recently it has become national in name and character. Largely attended and important meetings are held by this association during the Christmas holidays

[1] Shorthand reports of these meetings were made for several years by Charles M. Miller of New York City.

of each year. The Eastern Commercial Teachers' Association is a strong organization, which holds its meetings yearly about the time of the Easter recess. Though the membership in the two latter organizations is not restricted to private school teachers, they largely influence the policy of both bodies.

Organization and Administration of Private Commercial Schools. — The one thing to be kept in mind is that business colleges are proprietary institutions, conducted for profit. When one takes this into account, it seems rather remarkable that they have improved as much as they have. Professor James analyzes the work of these schools as follows: in a new country where there is a wish to get a rough-and-ready preparation for work, they have served a useful purpose; their success has been due to the fact that people know what they want and are ready to pay for it.[1] In many cases these schools have proved good business ventures. Students are dealt with individually, and are advanced as rapidly as they can complete the technical work that forms the basis of their course. It is therefore possible to begin at any time. In some cases the schools are kept open the year round; in others there are vacation periods, the time for which is made up, or there is a corresponding reduction from the students' fees. The usual range of fees is from $75 to $130 for a year of ten months. In some schools the range is higher than this and no doubt in others it is lower. Students are required to buy their

[1] Monograph on *Commercial Education in the United States*, prepared for the Paris Exposition.

books and stationery of the school, and on this there is usually a profit. Trial scholarships are given free by some schools in order to get a hold on students, but the better class of business colleges look with disfavor upon this practice. Another practice resorted to by some, though generally disapproved, is to guarantee positions on graduation. Failure to get a graduate a position within a given time and at a minimum salary, places the proprietor (according to his contract) under the necessity of refunding all money paid for tuition. The feeling of many in the profession is that this is not a fair contract, and it is the belief that it is not carried out in good faith.

In some schools it is the practice to graduate small groups of students as they have completed the work; each group is numbered as a separate class. In other schools there is a general commencement where all who have completed the courses in a year's time are given diplomas. These graduation exercises are made important functions in certain schools.

The nearest approach to control over the private schools in the United States is by the inspections and examinations of the Board of Regents of New York State. After being inspected, schools may be accredited and they may then give the Regents' examinations. Students that are successful are furnished with a diploma. It has come to be thought in many quarters as an indication of merit to be on the list of accredited schools, and the character of work in a school is felt to be attested by success in examinations. The inspector for business education reports that the

business diploma is recognized as an indication of proficiency in the subjects for which it is given.[1]

Educational Significance of Business Schools. — The business college has been and to a large extent still is a special school. When this is kept in mind, it makes the treatment of the private commercial school an easier problem. When the reactionary proprietors met in 1866, they formulated an address on their work; in this was expressed the hope of systematizing methods of instruction and discouraging the idea that a business education could be obtained in a few weeks. Coupled with this was a statement of the relations that the special form of education which these men were seeking to promote should sustain to general education: "We desire, also, to state most explicitly that we do not entertain the thought for a moment that our schools can in any way be substituted for those whose object is the general education of the people. On the contrary, we believe that, in any healthy system of education, the special school can only supplement and be founded on the general school. We have no desire to offer any inducements to young men, to draw them away from their general studies prematurely, for we believe that the highest culture is just as essential to those who would occupy high positions in business life as to any other class of citizens."[2]

This sentiment thus early expressed has been reiterated by representative business college men. In 1885

[1] Selected questions from those given in the Regents' examination appear on pages 344–346.

[2] *Address and Constitution.*

Mr. Packard said that it was not necessary for the business colleges to encroach upon classical and preparatory schools, adding, "The more of these schools there are, and the better they are, the better for us and the community." The coming of the higher schools of commerce has made necessary a new adjustment of the business school; and in seeking for opinions as to the lines along which this adjustment should be made the writer found well-defined notions among business college men. The principal of the Rhode Island Business School in a personal letter elaborates the proposition that the private commercial schools are "schools of record," concluding with the statement, "We are in a class by ourselves as much so as are the dentist and physician in classes separate from the academician. If ever the history, philosophy, and jurisprudence of business are to be taught, they will be taught in schools established on other bases than our present business schools."

The school of the old three months' course was designed to teach a trade to mature people. This they did effectively, and by them many ambitious men were given the equipment to start in the right direction. But the notion was narrow and of late is out of favor with business college men themselves. The president of the Federation of Commercial Teachers in 1897 attacked the "clerk factory" and "educational repair shop" ideal, and urged that proprietors make their institutions real business training schools. The overtechnical character of business college work, with the attempt to bring the shop into the school,

has made the American business college somewhat ridiculous, and it has been the object of caricatures, among them that of Robert Louis Stevenson and Lloyd Osbourne in *The Wrecker.*[1]

Another aspect of the short course problem is getting students at too early an age. Specialization without maturity or sufficient preliminary education has proved unsatisfactory to all concerned. Many immature persons are thus "forced to rise too early in their development"; to adapt a phrase of Huxley's, "they are conceited all the forenoon of life, and stupid all its afternoon."

In every direction the sentiment is for longer courses. Preparatory departments are maintained by some schools; others refuse to take students who have not had a good general education. In the Rochester Business Institute an examination is required for admission into the shorthand department; the practice of taking students on trial at the Packard School amounts to the same thing. Those whose development is slow are kept for the second year in many of the schools. The time requirement is gradually being lengthened, thus at the Packard School the average at present is fifteen months or one and one-half years. In the Peirce School of Philadelphia, students are required to sustain themselves in an exacting examination before they are graduated. The subjects of this examination for the business course include the following: commercial calculation and rapid reckoning, theory

[1] An extract from this, in Hartog, "Commercial Education in the United States," pp. 18–19.

of bookkeeping, commercial geography, business writing, practice of bookkeeping, business customs, business forms, and commercial law.[1] The first business school known to the writer to offer a second-year course as a regular department of its work was the Metropolitan Business College of Chicago.[2]

The improvement in secondary education, and particularly the taking up of commercial work by public high schools, has had a good reflex influence upon the business colleges. The last-named schools are not doing their technical work less efficiently, and they are giving much more attention than formerly to the demands of a general education. Probably President James is right in his statement that the better class of business colleges are doing the technical work more effectively than it can be done in the public high schools.[3]

An expert committee reported to the Business Education Section of the National Educational Association in 1898

[1] Papers from this examination are given on pages 347 and 348.

[2] The curriculum for this school is given on pages 304, 305.

[3] The director of commercial education at Drexel Institute writes: "I believe the feeling of rivalry which sometimes prevails between the high school and the private business school is wholly unfounded and will quickly disappear as we come to have a proper conception of the part which the secondary school is to play in the future of commercial education. The fields of effort of the business college and the commercial high school are so distinct in purpose and so widely separated in scope that a conflict of interests is well-nigh impossible. Quite to the contrary, the interest awakened in the mind of high school youths will divert many to the business college after the first or second year of the high school course for the quicker acquisition of that special clerical training which the private commercial school is best able to furnish." — SCHOCH, *The Business College and the Secondary School.*

on the curriculum for commercial colleges. This committee set as an ideal a curriculum that would make it possible for a student to pass over from the business school to the business office with the least loss of time and with a minimum of difficulty. The report seems the most satisfactory statement yet made on the business college curriculum. The curriculum presented is closely correlated,[1] and the discussion of the committee emphasizes the relations and interdependence of the parts. The course is broadened by making English fundamental, and mathematics and business practice a basis for bookkeeping.

As one works through the annals of the private commercial schools he is struck with the devotion of the leaders in this movement. Bartlett gave his life to furnish for others a kind of training which he had sought in vain for himself. His death-bed message was, greeting and God-speed to the business college men of America. Those who came in contact with H. D. Stratton were

[1] Mathematics —
(*a*) Bookkeeping. (*b*) Arithmetic, including Rapid Calculation.
Writing —
(*a*) Penmanship. (*b*) Shorthand. (*c*) Typewriting.
Business —
(*a*) Business Practice, including Business Methods and Customs.
(*b*) The History of Commerce. (*c*) Commercial Geography.
English —
(*a*) Spelling. (*d*) Composition and Rhetoric.
(*b*) Grammar and Punctuation. (*e*) Public Speaking.
(*c*) Business Correspondence.
Civics —
(*a*) Commercial Law. (*b*) Civil Government. (*c*) Economics.

struck with two things: his sense of the importance of his mission, and his abiding faith in honest work. Mr. Packard, who went through the Bryant and Stratton period, says that the sole capital of these men was "energy and hope"; in later life, as he looked back at what had been accomplished and considered the instruments used, he felt that the results were little short of miraculous. Silas S. Packard himself possessed to a remarkable degree the power of leadership. Among the thousands of his own students, among those of his profession, in the wider life of the city, state, and nation into which he entered, he was always known as a man who rang true. Yet he was a simple, unaffected teacher who said: "If in all coming time I shall have no other designation than 'schoolmaster,' and if it shall be known that in this calling I have not wholly failed, my highest personal ambition will be met. It is of this title I am most proud." This is hardly the place to speak of many still living who are actuated by the spirit of those mentioned above. What higher tribute to a schoolmaster than that paid by Lyman J. Gage to Robert C. Spencer! "Looking back over the earlier days when educational influences were to some extent thrown over me, and the experiences of later life have gone to shape my character and determine my general course of thought, feelings, and action, there is no event, no period, no episode in my career now stretching over a long period that I regard as so valuable in itself as that period spent in the Chicago branch of the Bryant and Stratton educational institution." Such testimonials

might be multiplied. Over twelve thousand students have gone through the Spencerian College of Milwaukee, and a list of graduates of that school contains the names of many men who have come to distinction in public office and private affairs. Twenty thousand students are said to have gone through the Packard School in New York. In a great metropolitan center that school has been as a leaven that has acted for good with unmistakable influence. The American private commercial school has done and still is doing a useful work. It is true that educational charlatanism has sometimes been practiced by business colleges; but let us not forget that it has also been practiced by other institutions, and also that such practices have long been discredited by the better class of business school men.

Endowed Private Schools. — The Drexel Institute of Philadelphia is an illustration of the private endowed school which furnishes commercial education. These schools are quite independent of students' fees; and although they give technical work somewhat in the line of the best business colleges, they treat the subjects of study more liberally.

Neither can schools of this sort be classed as secondary. Many of their students have had a general secondary education before coming to them, and some have had a college course. The work in commerce and finance at the Drexel has been going on since 1892, and the Institute may be said to have made an important contribution toward furnishing instruction in schools of this class.

Courses are furnished at present along four lines: (1) in commerce and finance; (2) commercial course for teachers; (3) office courses; and (4) evening courses. The first is a two-years course and forms the most important division of the work. The aims of the commerce and finance course are to prepare for business along the following lines: (1) the production, manufacture, sale, and transportation of articles of commerce; (2) the management of stock companies and corporations; (3) the buying and selling of securities; (4) the importing and exporting of merchandise; (5) the borrowing and lending of money and credit; (6) the advertising of commercial concerns; (7) the keeping of business records; (8) a knowledge of the Spanish language.[1]

The other commercial courses at Drexel Institute are more narrowly technical. The special course for teachers calls for notice in another connection (see p. 298). The office courses are offered along three lines, each for one year: (1) private secretary course; (2) bookkeeping course; and (3) stenography course. The last two are similar to corresponding courses in business colleges; the first is of more interest. The secretary course is an outgrowth of the demands for persons of good intelligence who can do more than mere routine work. Preliminary education of at least the high school grade is required for admission into this course. The director of the department reports that college graduates who wish to enter on a commercial calling to advantage have

[1] The curriculum for this division is given on pages 305, 306.

in some instances taken this work. The subjects for the year, with the hours per week, are as follows: —

Shorthand	9
Typewriting	5
English Language	2
Spanish Language	2
Accounts, Business Forms, and Customs	1
Correspondence	1
Penmanship	1
Business Printing	1
Physical Training	2

The department of commerce and finance enjoys special advantages at Drexel Institute. A fairly complete commercial museum has been collected by the students; there is also a good library. Those interested in the progress of the various forms of commercial education in this country will watch with interest the further development at Drexel Institute.

Commercial work at Pratt Institute in Brooklyn was begun in 1888. In 1895 the accommodations in the Institute were inadequate, and the director of the department organized it as an independent institution, the Heffley School. This school has retained the liberal character of its original organization, and there center about it a number of lines of work both liberal and professional in character.

Simmons College in Boston is one of the unique institutions giving commercial education. This is a technical college for women; it takes students of the rank of high school graduates and offers them work for four years.

Shorter courses are also provided for those who cannot attend the full period, or who are prepared to shorten the four-years time. Instruction is given along three lines: (1) Regular course of four years, preparing for professional positions and for teaching; (2) advanced course of one or more years for college graduates; and (3) special or partial courses. Subjects of study for the regular course are given below.[1] It is the purpose of this curriculum to prepare for secretarial work, office assistants and the like. Those having a college preparation are allowed to divide their time between shorthand, typewriting, and "secretarial duties." Special students are given a wide latitude in making up courses.

The latest statistics in the report of the Bureau of Education show that there are over 500 private commercial schools with students numbering nearly 150,000 (see p. 304). An examination of the names of institutions

[1]

First Year	
English	3
French, German, or Spanish	6
History	3
Hygiene	1
Shorthand and Typewriting	3
Physical Training	2

Second Year	
English	3
French, German, or Spanish	6
History	3
Shorthand and Typewriting	3
Physical Training	2

Third Year	
English	2
Library Economy	3
Secretarial Subjects	2
Shorthand and Typewriting	2
Electives	6
Physical Training	2

Fourth Year	
English	2
Secretarial Subjects	5
Shorthand and Typewriting	2
Business Law	3
Electives	3
Physical Training	2

cited in the report shows that many schools are not included, and an estimate of 2000 schools with 160,000 pupils seems conservative.[1] *The Penman's Art Journal* of New York collected statistics recently showing 2360 commercial schools in the United States and Canada. Students to the number of 240,000, and teachers numbering 15,000, were determined by the same investigation. Much the larger proportion of the preceding totals belong to the United States.

[1] James, *Commercial Education in the United States*, p. 8.

CHAPTER VII

Secondary Commercial Education in the United States

How Secondary Schools are Regarded. — There are many ways in which a system of education may be considered. Quite recently the president of one of our largest universities said it should be like a pyramid which all the way down takes its shape and proportions from the cap-stone at the apex. The suggested apex is the university; but the objection to this is that the cap-stone is of too formal a cut, and too often it has pressed down rather than lifted up. Any attempt to make part of an educational system dominate the whole is to be deprecated. Each division of the field should influence and in turn be influenced by the other divisions. There can be no rational study of commercial high schools without regarding both elementary education and the training of colleges and universities, just as a study of higher commercial education should have due regard for the preparatory work on which it must rest as a foundation.

Higher institutions by college entrance requirements and accredited schools have so far dominated secondary education as to make "high schools" and "preparatory

schools" almost synonymous; and this, despite the fact that relatively but a small portion (termed in the Committee of Ten's Report "an insignificant percentage") of students from secondary schools ever enter upon courses at colleges and universities. The traditional college entrance high school has been aptly termed "a fetich," or "something irrationally reverenced." Existing high school education as pointed out before a recent Harvard Teachers' Association tends to leave the boy who does not go to college "indefinitely and unhappily suspended between the earth of the elementary school which he has come to despise, and the heaven of the university, which he is taught to aspire unto in vain." It is not strange, therefore, that business men have chosen to employ young people directly from grammar schools, or those trained in business colleges, rather than those from high schools. In the combination of knowing and doing, and in their aptitude to learn, the business community has found high school graduates wofully deficient. Secondary education should have less regard for the small minority that enters upon higher education, and consider much more the rights of the large majority that does not. Incidentally only the high school should be a fitting school, and it "wrongs the public when it gives its best effort to college preparation." Similarly, only incidentally should the elementary school prepare its pupils for admission into higher schools. At each stage there should be an education complete in itself, which should articulate with the next higher stage.

Ideals for High Schools. — High schools should be at

once finishing schools and fitting schools, — the former for those who do not enter upon higher institutions, the latter for those who do. Industrial and social interests of the community should find their expression in high school organization. Without abandoning the educational ideal, high schools can have much more regard for the future vocations of those who attend upon them. The English Royal Commission's definition of secondary education is not without interest in this connection; it is "the education of the boy or girl, not simply as a human being that needs to be instructed in the mere rudiments of knowledge, but it is a process of intellectual training and personal discipline, conducted with special regard to the profession or trade to be followed." Such, in spirit, is becoming the treatment of the high school education in our own country; such the universities have already become, for, as declared by the late president of the University of Wisconsin: "The old-fashioned college, designed for a few favored classes, belongs to the past. The modern democratic and industrial world demands a university as broad as the life and interests of all the people." The coördination of a university of this sort with high schools conceived in the same liberal spirit ought not to be difficult. When the universities widen their system of credits, or entrance requirements, and touch the schools at more points, the question will settle itself. As the instruction within the university is modernized, it becomes easier to recognize modern subjects in the secondary schools. If schools do good work in a wide

range of subjects, commercial included, the universities should approve this either by credits or examination; but let those in the schools escape from the bugaboo of getting into college. The boy fitted for getting into life ought not to be thereby incapacitated for getting into college, and if he is, there is something wrong with the college requirements. First, let there be schools giving real education, — classical, English, manual training, and commercial, and then let the universities welcome students from any and all of these schools. It is manifestly unfair to compel all students to take a special course for college admission when only a small proportion go to college; it would be just as unfair to deny college admission to those who have not taken the required course, but who find at the close of their high school work that it is possible for them to go to college. The rational thing is to open more doors between school and college. This does not mean the acceptance of poor work, but the more general acceptance of good work. A reasonable ideal is better schools and more students in the schools, better colleges and more students in the colleges, and a more vital and organic connection between school and college.

In the application of this principle to the relations of the secondary school of commerce and the higher commercial school there are no serious difficulties. The secondary school here meant is one with a curriculum equal in extent, and fairly corresponding to other high school courses in educational efficiency. English, history, the modern languages, general science, elementary algebra, and plane

geometry — these must form the basis of the high school of commerce curriculum as of other high school curricula. There can be no objection to the universities recognizing work of this sort, and it but remains to ask what will be the attitude of the higher commercial institutions to the more special work in such subjects as commercial geography, elementary economics, bookkeeping, and shorthand. Commercial geography is fairly equivalent to the physical geography of the other courses. The universities of commerce must have an introductory course in economics at some time, and why should they not recognize this work if it has been done in the upper high school years? If elementary economics were already completed, it would be a saving of time, as the students could enter at once upon a study of more advanced economic theory, and of applied economics in the many fields of commerce and industry. The latter is after all the best work in economics that the college of commerce can do, and more of this can be accomplished if the preliminary course be given in the secondary school. One might go farther and say that this introductory work in economics could be accepted for advanced standing in the university.

Concerning the bookkeeping the case seems clear. The higher commercial schools are giving or planning courses on the science of accounts. These are principally in lectures dealing with ideas and terms of which the student knows little unless he has been taught the elements of accounts. Either these lectures will miscarry, or the universities must teach bookkeeping preliminary to them, or

they must get the schools to teach bookkeeping. The latter is preferable, and the higher schools of commerce should coördinate themselves with the secondary schools and get the necessary preliminary work done by recognizing and accrediting that work when it has been well done.

It is doubtful whether our universities will teach phonography; and yet who questions the practical and, one might almost add, the cultural value of shorthand writing? Such writing would mean to every professional and business man an increase of efficiency amounting to the lengthening of life. In the making and preserving of memoranda, in the keeping track of a multitude of details, shorthand writing is invaluable. The head of the Baldwin Locomotive Works has said recently that he took up and mastered shorthand for its practical use to him. Men in various walks of life could do their work better and easier if they knew this form of writing. The typewriter, too, has become an indispensable adjunct to modern literary life as well as to the conduct of business, and familiarity with it is part of a general education. These facts so profoundly affect the work of students of commerce in the universities, and in the future practice of their callings, that the universities cannot afford to ignore them.

This question of relations of school and college is thus dwelt on because it is one on which there is such lack of agreement. The high school should be a good finishing school, because for the most of its students it closes their school life; it may at the same time be a fitting school, by universities liberalizing their entrance requirements so that

the finishing subjects may be offered either by certificate or examination to satisfy college admission. This, it would seem, is the true ideal for coördinating higher institutions and secondary schools.

History of Commercial Instruction in Secondary Schools. — The ideal above set forth is not revolutionary; it is but a recognition of the conditions out of which the high school originally grew — conditions which still exist and which should influence policies of secondary education. The historian of these schools, Professor Elmer E. Brown, says that the early high schools arose as an extension upward of the elementary school course. It would be as much an error to permit high schools to be formed by this ideal alone as it is to fashion them by the extension downward of the classical college course. The high school should be influenced by both elementary school and university, and by the larger social needs in the community life of which it is a part. The school with which the writer happens to be connected, and which dates back to the rise of secondary education in this country, may serve as an illustration: Alexander Dallas Bache came to the organization of this school fresh from a study of education in Europe. He provided three courses: A "principal" course for four years, modelled after the *Realschulen* in Germany. It was the purpose of this to prepare young men for commerce and industry, and it is not strange that this division of the School claimed two-thirds of the pupils. Parallel with this and equal to it in extent of time was the Greek and Latin course, which prepared for college and

for professional studies. Supplementary to the foregoing was a shorter English course for those who could give but two years to high school studies. In 1841 Bache described the aim of the School to be "to provide a liberal education to those intended for business life." James P. Wickersham, who inspected the work about this time, said that the instruction was extensive, and that when compared to the instruction in colleges a "more practical business turn" was given at the Central High School. In 1842 Bache went into the government service in charge of the Coast Survey, but his successor in the presidency at the Central High School further developed it on the modern side.

By 1849 shorthand had become popular in America, and a phonographic society was organized among the leading citizens in Philadelphia. In the year named, Oliver Dyer, one of the enthusiasts of this society, got permission to form a volunteer class at the High School. For one term he taught 250 pupils free, and out of school hours. The subject was so popular and results were so satisfactory that the next year shorthand was added to the School's curriculum under a regular instructor. Attack and defense was the common order for four years, when it was proposed that shorthand should be dropped, on the grounds that it was not a part of an education and that it made bad spellers. John S. Hart, then president of the School, made a test by dictating a series of exercises to those who had, and then to those who had not studied shorthand, and found that the ratio of

errors were as one to five in favor of those who had studied the subject. In a letter reporting the results of the investigation, President Hart said of shorthand: "It aids the students by facilitating the taking of lecture notes in the higher work; it is part of a general education in that it necessitates habits of close attention, and requires a cultivation of the ear."

The practical results from a study of shorthand also appealed to President Hart, and he said that graduates of the school not yet twenty were commanding more money at reporting than he was making after twenty years in his profession. Several men early went from the Central High School to reportorial work in the federal Congress, and one of these said in 1854: "It would seem that the day is not far distant when the High School will supply the Congress with reporters as it does the Coast Survey with clerks."

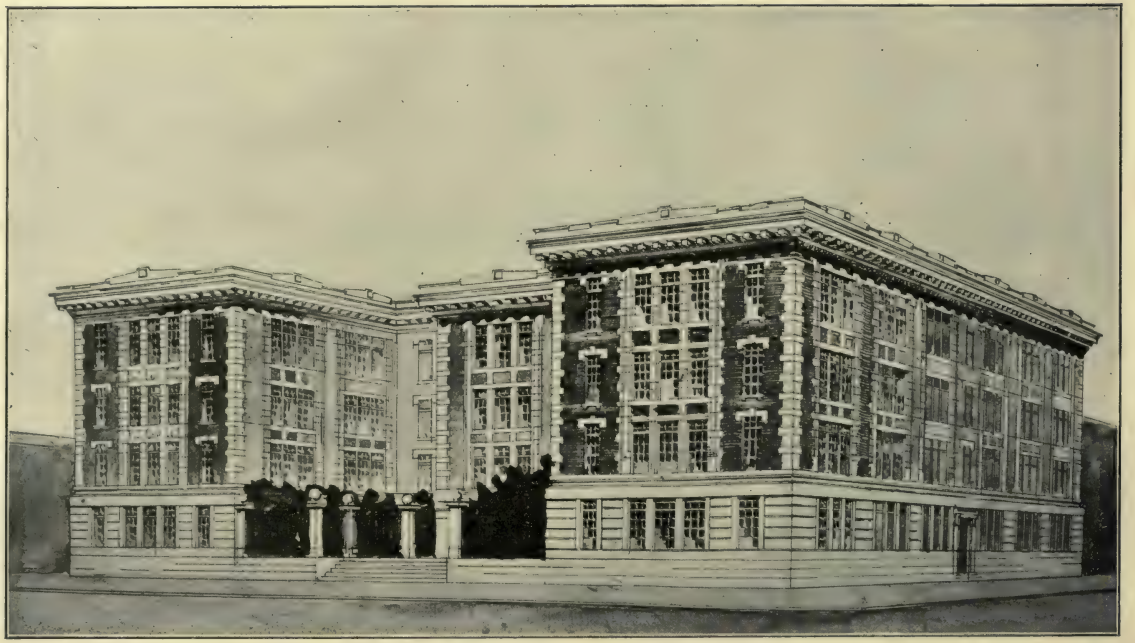
But what is stated above constitutes the least convincing of the facts to show the wisdom of having the type of school that the old Philadelphia Central High School was. Hon. Henry R. Edmunds, the president of the Philadelphia Board of Education, and many other lawyers of the city, still practice the shorthand writing, learned in some cases fifty years ago. The testimony of these men and their own careers is a most convincing argument, if argument were needed, of the wisdom of having such a course as they took.[1] It was fortunate for Philadelphia

[1] The author recently met Mr. Francis C. Moore, for many years president of the Continental Insurance Company, New York City, and had from him the

that when her educational administrators came to plan for the modern high school of commerce, they had to deal with men trained in a business high school of so good a type.

The Central High School in Philadelphia went the way of most high schools during the last third of the nineteenth century, and became dominated largely by the classics. Two other influences began to work in this period. The first was that of the popular and successful business college that was taking so largely of the high school students. To offset this, public high schools introduced short and technical courses of the business college stamp. The courses began quite thirty years ago, and in some quarters are still in operation. Mr. Durand W. Springer, of the Ann Arbor High School, makes the following very satisfactory statement of the mistakes from setting up commercial work, for one or two years, in the public high schools: "The short courses were failures. They created wrong impressions in the minds of the students. They belittled business by implying that the preparation required by the successful business man was not as great as that demanded by the successful man in other pursuits. They attracted an inferior class of students. They created wrong impressions in the minds of the public as to the disciplinary value of commercial studies. Graduates from a one or two year commercial course were compared with

statement that he had used shorthand writing for forty years, and found it of incalculable service. Hon. George B. Cortelyou, the youngest man ever to receive a cabinet portfolio in the federal government, and one whose appointment was everywhere approved, rose to the position from being a stenographer.



HIGH SCHOOL OF COMMERCE, NEW YORK CITY.

graduates from other four-year courses, to the disparagement of the former, and in most cases the critics did not take into consideration the fact that the training was from two to four times as long in the one case as in the other." [1]

The second influence working to changes in high schools was the agitation of students of social science and education. In 1892 Professor James made his plea for a commercial high school before the American Bankers' Association. The suggestions in this address met with a hearty response. The movement was taken up in various quarters; the old business college high school courses were enriched, and elective commercial instruction was offered in existing schools. In 1898 the High School of Commerce, with its independent organization and a full four-year scheme of studies, was established at the Philadelphia Central High School. The movement for a four-year curriculum has grown in favor, and recently the expert Committee of Nine, in the Department of Business Education of the National Educational Association, has unanimously recommended for a four-year course, and suggested a curriculum.[2] The shorter courses have been lengthened from one year to two, two to three, and three to four; New York has established a High School of Commerce with a five-year curriculum;[3] independent commercial high schools are already in operation in New York, Brooklyn, Philadelphia, Washington, Pittsburg, Los Angeles, and Syracuse; commercial departments are conducted by the scores and hundreds in every part of the country, and already

[1] *Michigan Alumnus*, December, 1902. [2] See p. 309. [3] See p. 312.

there is a large attendance. Of the 780 schools taking the Regents' examination in the state of New York in June, 1903, 500 took the business subjects. Already this form of instruction is finding a large place in our system of secondary education, and yet we may feel that the development in this direction has only begun.

Why Secondary Commercial Education is Popular. — Professor John Dewey has written recently that secondary schools are still either a lower college with a curriculum more advanced than that of the old-time college, or they are the "rounding up of the utilities of the elementary school."[1] Education in the United States, following the English ideal, has been too severely and too narrowly classical. The classics dominated first the colleges, and through them the secondary schools. High school education came to be regarded either as the sacred portal of the classical college, in which case it was considered all very well for those who had the inclination and could give the time to classical studies, but as not for the rank and file of our communities; or they were a sort of blind alley, having no connection with higher education. Mr. Sadler says that with them in England commercial education means quite as much an angry cry of protest against misplaced and mechanical classical education as it does any definite policies that those who are pleading for it wish to have carried out. Such is the feeling in many quarters in our own country. Manual training instruction came in the form of a similar protest against the amount and character

[1] *School and Society*, p. 83.

of classical study. Secondary commercial schools have multiplied, and will continue to multiply, because they are more than an enlargement of the elementary school ideal —upper grammar schools; and while they are broadly educational, they are this without being restricted to the classics. Commercial high schools are modeled with regard for the social needs of the communities in which they exist; they are an attempt to make universal or to democratize culture. President Eliot recently spoke encouragingly of secondary schools when he said that they are more and more escaping from the sway of two ideas that have wrought great harm to American education: the idea of equality of powers and opportunities of those for whom they are planned, and an attempted uniformity of school product. He, however, rightly qualifies this statement with the observation that, while these are abandoned theoretically, they too largely prevail in practice. Enthusiasts for a fixed and unchanging education might well regard the admonition: —

"Lest one good custom should corrupt the world."

Two generally recognized facts bear on this discussion: the first is the phenomenal increase of high school attendance in recent years; and second, the still relatively small proportion of our school population in the high schools. The first is no doubt due to the improved economic conditions, to much study of the problems of secondary schools, and to the closer correlation of these schools with colleges. It has been a source of great satisfaction to some who have written on this subject

that the proportion of those who study Latin in public high schools has increased relatively faster than has been the increase in attendance on such schools. This is not without its bearing on another fact that needs explanation. Why are there so few pupils in the high schools?

In a paper recently prepared by Dr. Daniel Fulkomar of the University of Chicago on "The Duration of School Attendance in Chicago and Milwaukee," the following very striking facts are set forth: Only about 3 per cent of those who enter school go farther than the eighth grade, and about three in every thousand graduate from the high school. A press comment on a late official report of the Department of Public Instruction of Michigan furnishes the following: Less than 16 per cent of the total enrollment enter the high school; less than 7 per cent graduate from high school; about 2 per cent of the total enrollment take a college, university, or professional course in the higher institutions of learning. If anything like the maximum percentages here given hold for the state of Michigan, educational conditions are much more favorable there than in the country at large, and yet this maximum is much too low. The relative proportion of high school attendance to the total school attendance in half a dozen of the leading cities of the country is approximately as follows: New York, slightly more than 3 per cent; Chicago, $3\frac{4}{5}$ per cent; Philadelphia, $2\frac{3}{4}$ per cent; St. Louis, $2\frac{1}{2}$ per cent; Boston, $6\frac{1}{5}$ per cent; and Baltimore, $3\frac{1}{2}$ per cent.[1]

[1] *Statistics of Cities*, Bulletin Department of Labor, September, 1902, pp. 966–967.

It will thus be seen that the usual proportion of our high school attendance is about three to seven out of every hundred in attendance upon public schools. This proportion ought to be more than doubled. The high school should bridge the gulf separating it from the elementary school, and if so it can hand on a larger number of its students to the university. Not only have the traditional college entrance courses failed to attract students to the high schools, but many who enter are driven out because they have neither inclination nor aptitude for the studies required. Those who write down such students "dull" and "stupid," very often judge themselves. Much of the so-called "dullness" is on the side of educational administrators who are trying to fit "square pegs into round holes."

It is thus seen that we are confronted with educational conditions as well as theories. Three sets of interests at least make demands upon the secondary schools. These are professional or literary, industrial, and commercial. If the demands of these are rationally met, and if high schools are properly coördinated with the elementary school on the one hand and the universities on the other, we shall have realized somewhat Huxley's ideal of an educational ladder reaching from the primary school to the university. Let this ladder be wide enough to accommodate all who want to ascend it, and let the meaning and the probable rewards of ascent be such that a larger number will want to go up. Commercial high schools will add to the number who go through the sec-

ondary schools, and this in turn may be a means of increasing the number who go to higher institutions. A deduction from the experience in the high school at Philadelphia is warranted by reports from other quarters. If the commercial work offered had not been available, many of the students would have gone to work directly from the grammar schools, or they would have entered upon short technical courses in private business schools. The constituency of the Philadelphia school is largely of the middle class, — small tradespeople, clerks, skilled laborers and the like, — whose decisions are largely governed by practical considerations.[1] In general, these people are

[1] The facts as to the occupations of the parents of boys in this school for four years are as follows: —

	1898	1899	1900	1901
Independent Business	66	55	77	51
Clerks and Sales People	35	39	19	22
Skilled Laborers	38	48	59	48
Public Employees	7	7	6	4
Unskilled Laborers	4	10	2	3
Professional	—	6	—	9
Quasi-professional (Collectors, Conveyancers, etc.)	2	5	10	16
Retired, or with no Ascertainable Occupation	22	15	12	24
	174	185	185	177

The similar facts as to the parents of those electing commercial work (1901 and 1902) in the high school at Lowell, Massachusetts, are as follows: —

Independent Business	28	Engineers	4
Clerks and Sales People	16	Carpenters	9
Skilled Laborers	61	Machinists	17
Unskilled Laborers	30	Firemen	4
Professional	4	Farmers	13
Quasi-professional	8	Janitors	2
Policemen	11	No Ascertainable Occupation	21

Irish, *School Review*, September, 1902.

too sensible to want their boys put through any sort of a conventional high school course as a party of tourists are rushed through a country, just to be able to say that they have "done" it.

Separate Commercial Schools. — There are three possible ways to introduce secondary commercial instruction: the first is by the addition of new subjects as electives into schools as at present organized; the second is by the introduction of distinct commercial courses into existing schools, the formation of schools within schools; and the third is by the formation of independent schools. The chairman of the Committee of Ten on secondary education said in a personal letter some years ago, "All the commercial instruction required for high schools can be furnished by the introduction of elective courses into schools already existing." Later, in a public address, he discredited such elective commercial work, saying that it nearly always resulted in the substitution of an inferior form of training for a superior one.[1] May it not be that the best way to avoid the criticism is not to follow the original advice? Conditions will in many cases make the elective scheme necessary, in which case old subjects will be retained in their old form, and technical instruction will be introduced as new work. Probably both the academic and technical elements will suffer from this arrangement. Another and wiser plan is to retain many of the old subjects and give them a new interpretation and application. This may properly be termed the "com-

[1] Eliot, *Proceedings International Commercial Congress* (1899).

mercializing of the curriculum," and present tendencies in secondary commercial education are in this direction.

To realize the ideal just set forth, there must be the grouping of students either in separate courses or separate schools; this will make possible the suiting of instruction to their special interests and needs. The gains from such an arrangement are twofold: the technical work is made more educational, and sound education is made more general.

Whenever in any community the number of students who desire commercial instruction is sufficient to warrant a separate school, the independent school may well be established. The conditions here specified will be found to obtain in most large cities. Similarly, whenever in any school the students want commercial instruction in numbers sufficient to form a separate class, such a class may well be organized. These conditions will be found in most large high schools. Educationally and technically, commercial work will be better done in an independent establishment, than as a side issue to other schools and courses. Commercial education will be vitally affected by the decision on this question. In his paper on Commercial Education in the United States, President James writes as follows: "Secondary education of the manual training type is to-day years ahead of the development which would have been possible if the separate manual training high schools had not been established. Place the commercial course in the ordinary high school largely under the charge of the present teaching force, and you

rob the new movement of half its possibilities. The problem of working out good secondary business education needs all the freedom that is feasible; it can be solved only by independent faculties, with every member intent on the questions of his own department, but also grappling with the problem of the entire scheme of studies. Under these conditions an *esprit de corps* will be aroused, greatly conducive to the final success of this feature in the system of public instruction." It is especially important that there be independent schools at the beginning; "when a few such schools have wrestled with and solved the problem of commercial instruction, the ordinary schools will have a better basis for commercial courses."

Guarding the Educational Interests. — Those who organize and administer secondary education should see to it that they do not offer a short or an easy way to get through the high school. It would be unfortunate for general education, and highly inimical to commercial education, if commercial high schools should abbreviate or cheapen the grade of work in which they are placed. The rapidity of the introduction of commercial instruction, with the dangers which it brings, led President Harper to ask in his review of the year before a late meeting of the Council of the National Educational Association, "Is this phase of secondary work moving at too rapid a rate?" "We must not forget," he continues, "that years are required to develop a new subject for practical educational results. Are we throwing aside those subjects whose educational value has been tested beyond question, for the

sake of introducing new subjects which, at all events, for a long period must prove to be of lesser value?"[1] Attention is called to these questions because they emphasize real difficulties. It would seem, however, that President Harper has failed to regard two or three important elements in the case. First, aside from any new subjects that may be introduced, commercial high schools will retain many of the old subjects; and though these may be given a slightly different interpretation and application, their educational value need not be diminished thereby. Moreover, the United States has had experience with technical commercial instruction for sixty years, and some of the subjects to be added are not so "new" as might appear. Besides, there is a European experience somewhat different in character, and for a longer period, and this has already given valuable suggestion. And finally, the training of teachers for the secondary schools in the higher schools of commerce will insure the educational character of the lower schools, and unite them more closely with the higher commercial schools.

It would not be wise to minimize the difficulties, but these are not insuperable either in the internal organization of commercial high schools or in establishing their relation to the universities. Certain principles are universal, and with these the problems must be worked out;

[1] *Proceedings*, N.E.A., 1902, p. 355. President Harper concludes, "I would not suggest that this work is not to be continued, but it must be acknowledged that the most urgent need exists for caution and for a scientific study of the questions involved."

but they are individual problems, peculiar to sections, to states, and to communities. To recommend a universal procedure for all cases would be educational quackery; this chapter will have its largest usefulness if it has made clear the general principles only, and leaves the "specifics" to be supplied from a study of local conditions.

CHAPTER VIII

The Curriculum of the Secondary School of Commerce

Secondary School Curriculum. — Manifestly, a discussion on the curriculum without limiting it to some division of the field would be wide of the mark. At the same time it must be considered fortunate that neither the commercial course in the university nor the business college curriculum demands special consideration. The problem of the university is tolerably definite; it is recognized that any subjects that fit for a future calling may very properly be there studied: the experience of more than fifty years has fixed the traditions for the American business college; its subjects of study and the methods of presenting them are well established. There is general agreement also that the element of vocation should enter very slightly, if at all, into the work of the elementary school. But a very different set of conditions is found to obtain when one comes to consider the commercial high school. Uncertainty as to the function of American high schools complicates the problem: Shall these schools do one thing or many things? To what extent shall the element of training for a vocation enter into a public school,

established for purposes of a general education? These and many similar questions are involved. The curriculum is the crux of this problem in secondary education. In the present chapter, the discussion will center about the curriculum of the secondary school of commerce, although many of the principles set forth, it is believed, will be found applicable to other commercial schools.

Guiding Principles for the Commercial Course. — As the function of the commercial high school is not clearly worked out, and there is nothing like agreement as to the policy it should pursue, it is far from the purpose of the present chapter to fix any hard and fast lines for the curriculum. Rather does it seek to indicate some general aspects of the subject that may prove of service in further dealing with it. It is quite impossible to offer a scheme of studies universally applicable. A secondary school of commerce in a great center of international trade needs a curriculum different from what is needed by a school in an interior manufacturing or mining city, just as one in such a city should not be made the rule for a school in a town in which the business is largely local retail trade. But commercial education may universally set for itself certain ideals — such as the cultivation of intellectual power, and, what is quite as difficult, the acquisition of the ability to apply power to the matter in hand. If curricula be made in accordance with these principles, the training of commercial schools will render the double service of making subjects of instruction more practical, and practical affairs more intellectual. We have long had two inherited edu-

cational ideals that have existed side by side, but have not intermingled; these are the academic and the apprenticeship. The former has given scholasticism, the classical school; the latter, utilitarianism in education, the workshop. But the old division of studies into educational but not useful, and useful but not educational, is fast disappearing.[1] The useful is found to be intellectual, and much that was hitherto thought to have educational interest only has increasing usefulness. Dutton speaks much to the point when he advises us to be rid of our fears that plans of studies having utility will be profitless: "It is utility that gives subjects their highest value."[2]

It ought to be said with no uncertain meaning that commercial high schools are not to degenerate into the formalism of mere routine. When technical work is introduced there is great danger of all finding the dead level of the technical. Schools of commerce should be saved for all time from being intellectual nurseries, asylums, infirmaries, or hospitals. Let there be put into the commercial curricula subjects of difficulty, and let there be got out of them a ruggedness of training.

[1] Kahn, *Commercial Education in Secondary Schools.*

[2] The same writer in another connection thus described his experiences: "Recently in visiting an excellent high school, I stepped into a room where no less than twenty students were learning stenography and typewriting. With the natural reluctance which we all feel in accepting as educational those things which are particularly useful, I at once inquired what else these young people were learning in the high school. The principal assured me that they were taking a three years' course which was strong in English studies, and which gave a good degree of the culture element." — DUTTON, *Social Phases of Education*, pp. 130, 131.

And just here it is to be remembered that one's training from a subject is not always to be measured by the hours he dawdles over it. One can well conceive impossible tasks for a school of commerce, for which there would be slight educational return, even if they were completed. Education comes from activity, but not all forms of activity contribute equally to education.

Those who are to formulate courses for commercial instruction should see to it that they are sound educationally. Schools of commerce of the new type are not to be competitors with or duplicates of that clearly defined institution, the American business college. Let a strong emphasis be placed on the last word of the term "commercial education." If schools of commerce, as a branch of public education, are to win and hold the favor of educational experts on the one hand, and of the business community on the other, they must be more than "clerk factories," or "educational repair shops." No school can claim respectability and furnish a training cheap or inferior. Those cities that established two-year courses of study, and called them commercial high schools, did not duplicate the institutions that have been so important a factor in the recent industrial and commercial success of Germany, and that have made German education justly famous. It was little short of an *opéra bouffe* on education to find in courses of study algebra and phonography set down as exclusive electives, and what wonder that in schools where courses were so made "commercial" was a term of reproach!

The Commercial Course and Formal Discipline. — There are three ways, at least, in which the secondary school may be regarded. First, its function is held to be to furnish discipline or mental training. The upholders of the formal training idea believe that no better service can be rendered by the high school than to discipline the mind of the individual and leave his adjustment to the social order to come after school is over. As furniture for this mental gymnasium, fixed instruments are the best, hence the domination of the syntax of a dead language, the formalism of pure mathematics, and the classifications of systematic science. The inevitable result of constructing a curriculum according to this ideal is the adjustment to an earlier period, and the failure to realize the high standard set by Mr. Sadler, "the orienting of the school to the present day."

The weakness of students trained for mental discipline alone is their inability to transfer and apply the powers developed to the requirements of practical life. We shall agree that schemes of instruction, while they may train powers of the mind, do not render the greatest service unless they make sure that the power trained shall be turned to account. We know that judgment in one set of life's relations does not necessarily mean judgment for all other sets. Memory and imagination may be stimulated only to certain ends. If "sharpening of the wits" were the sole end of our instruction, then no better instruments could be devised than the ancient game of chess or modern whist. Every reader will call

to mind persons of splendid mental power when dealing with academic questions, who are utterly devoid of practical judgment. Curricula that are designed only for mental gymnastics may fail in the cultivation of intellectual powers that will be used, and it is not strange that business men often prefer boys from grammar schools rather than those from high schools of the formal training type.

Rational upholders of the commercial education idea believe that there is a formalism of training, and that to secure it there *are* instruments of education. On the disciplinary side the curriculum of the commercial school seeks to secure mental development, but to do so without sacrificing the adjustment of the student to the world in which he is to move. This is the question of whether instruction shall be simply good, or also good for something. On the door of the lecture room of a Scotch professor of metaphysics some waggish students wrote, "The road to nowhere," to which the professor added, "but a good road to travel for exercise." The upholders of commercial education hold that the road traveled for exercise may also lead somewhere. The trouble with the old formalism of culture was that the schools were in spirit mediæval, if not ancient. It was long the boast of the German higher schools that they transformed their students into good Greeks and good Romans; but there, even, more recently, the ideal is to make of them good Germans. Commercial schools, then, have no quarrel with formal training; they properly insist upon a rational use of it.

The great teachers of the classics are those who can vitalize their teaching by interpreting their subject in terms of modern life. Recently a memorial meeting was held to Professor George Allen, known to an earlier generation as a masterful teacher of Greek. One after another of Allen's pupils, now beyond midlife, bore grateful testimony to the influence of his teaching. Through all the addresses there ran the sentiment that one who studied with George Allen got more than Greek; to be under him was a liberal education; in teaching the Greek classics he taught also the military history of the world, but more particularly the history of the Civil War then going on; Greek texts were interpreted in Civil War campaigns by correspondences and contrasts, etc. This is a hint of what it is possible to do with a formal subject.[1]

The Commercial Course and Social Conditions. — A second notion of the function of the school is expressed in the proposition that it prepares for future life by reflecting or mirroring the social order. Thus the school would be converted into a miniature society — the world in little. Schools that correspond to the social order would change as this order changes, and with a progressive society

[1] In a recent article on "How to make Classical Study Interesting," Mr. H. E. Burton says: "To return to Cæsar. We must, if possible, make the pupil see the Roman army and the Roman camp, and we must make him understand that these campaigns were the first step in the Romanizing of Gaul, in the creation of the French people and the French language. And in that way we may connect antiquity with modern times and make him see not only the importance of the language, but the historical value of the subject-matter." — *Educational Review*, January, 1903.

there would be a progressive education. As the dominating science in the pedagogy of the formal culture adherents is psychology, so sociology is made to govern those who would have the school mirror the social world.[1] Rational adherents to the notion considered in the preceding section would hold to the same instruments of instruction, and find reform in changed methods of interpreting these. Those who adhere to the conception now discussed believe that both the materials and the methods of instruction should change with social evolution; but they believe that the school is a thing separated from and outside of society.

The weakness of both the preceding notions is in their artificiality — their failure to regard the many-sided purpose of education. John Dewey's trenchant criticism of existing curricula is based on their "lack of fundamental unity." He goes on to say, that "one study is still considered good for discipline, and another for culture; some parts of arithmetic, for example, for discipline and others for use, literature for culture, grammar for discipline, geography partly for utility, partly for culture, and so on. The unity of education is dissipated, and the studies become centrifugal; so much of this study to secure this end, so much of that to secure another, until the whole becomes a sheer compromise and patchwork between contending aims and disparate studies. The great prob-

[1] Dutton expresses the belief that the pedagogy of the future will take its direction from sociology rather than from psychology. *Social Phases of Education*, p. 126.

lem in education on the administrative side is to secure the unity of the whole, in the place of a sequence of more or less unrelated and overlapping parts, and thus to reduce the waste arising from friction, reduplication, and transition that are not properly bridged."[1]

The curriculum of the secondary school of commerce should be formulated with due regard for demands of the spheres of social activity upon which the educated are to enter. An earlier essay of President Butler laid down the following rule: "The first question to be asked of any course of study is, Does it lead to a knowledge of our contemporary civilization? If not, it is neither efficient nor liberal. In society, as it exists to-day, the dominant note, running through all our struggles and problems, is economic, — what the old Greeks might have called political." To this there was added the statement that it was "a constant fight to get any proper teaching from the economic and social point of view put before high school and college students." "They are," the writer says, "considered too young or too immature to study such recondite subjects, although the nice distinctions between Greek moods and tenses, and the principles of conic sections, with their appeal to the highly trained mathematical imagination, are their daily food. As a result, thousands of young men and women, who have neither the time, the money, nor the desire for a university career, are sent forth from the schools either in profound ignorance of the economic basis of modern society, or with only the

[1] Dewey, *School and Society*, p. 86.

most superficial and misleading knowledge of it." President Butler need hardly have entered upon a discussion of the "indefensibleness" of the conditions so accurately described. In the light of recent developments he might have enlarged upon the needs of preparation for economic citizenship. Fortunately, however, high school and college education are not at present so answerable to his criticism as they were in 1896.[1]

School and Society. — A third and more rational notion of the school is that it is more than a preparation for society, or reflection of society; it is society. For a masterful statement of this doctrine we are indebted to John Dewey. *School and Society* is a book which for philosophical insight, coupled with simple and convincing statement, has rarely been equaled; it preaches the gospel of a new educational dispensation in which schools and life cease to be at variance with some subjects of study for culture and others for information: "The growth of the child in the direction of social capacity and service, his larger and more vital union with life, becomes the unifying aim; and discipline, culture, and information fall into place as phases of this growth."[2]

The "disastrous waste" in education recently pointed out by Principal Robinson of St. Paul, and repeatedly emphasized by other writers, can only be avoided by fixing a unity of purpose and an emphasis on the social aspects of education, — "an emphasis which shall appear not only,

[1] *Educational Review*, January, 1896.

[2] Dewey, *School and Society*, p. 107.

nor chiefly, in the introduction of new subjects, but in the handling of all subjects with reference to their bearing on social welfare. The imperative need of the age is the *socialization* of education."[1]

It is the conception above noted that furnishes the guide for studying the educational program of the commercial high school. In many respects the business college people have in their day and generation been wiser than the so-called "children of light." With their model offices, counting-rooms, and practical work, business colleges were reproducing the business world, — in a narrow and artificial way, to be sure, but after all much more effectively than this was being done in the traditional secondary schools. The success and continuance of the business college is due to just this: it has done a work that elsewhere was generally neglected. Hitherto the business community has been unable to make any satisfactory use of those trained in the high schools and has been compelled to choose between the "devil and the deep sea" of general ignorance in those from grammar schools, and a meagre technical education in those from business colleges. A practical man speaking for the business community says: "Send us young men and women of capacity rather than those with mushroom ability." "Yes," he goes on to add, "the four years' course of study will develop capacity and ability to do, and to initiate, if it requires doing and initiative throughout the course, otherwise it will be as bad as the six months'

[1] *School Review*, 1900.

mushroom course which certainly fits students to do something, but does not as a rule give them persevering ambition to grow." The heart of the matter is that the school should be educational, and in addition it should have somewhat of the spirit and method of the work that the students are to do when they leave school.

Just here is the gravest of dangers. Many persons feel that the school should be equipped with a bank, a counting-house, and offices for this and that branch of trade. Such a practice may lead to the acceptance of the form of a thing without securing its spirit. Professor Wolfrum reported that in Germany and Austria many schools had tried and abandoned the "commercial office" method of instruction. He is quite within the facts in saying that this "playing at shop" in America is "unscientific and overdone," and that it may be neither "good school nor good office work."[1] Not long ago a commercial teacher visited a high school in which instruction in banking was being given; he asked to see the equipment for this work, and when he was shown an ordinary bookkeeping recitation room, with a couple of office desks and some extra filing devices, he attacked the whole idea. Logic was presented as follows: "A pen is necessary to teach penmanship; a typewriter is necessary to teach typewriting; and a bank is necessary to teach banking." Of course the answer to this is that if it be true, one can't teach transportation without a steamship, a miniature railway and train of cars, or anything of live stock with-

[1] James, *Education of Business Men in Europe*, p. 219.

out a drove of cattle. One might have all the banking paraphernalia in Christendom and fail in the purposes for which banking courses should exist in schools. A large display of plate glass and mahogany furniture will tend rather to fix attention on the externals and non-essentials. The letter killeth, but the spirit quickeneth.

To take banking as an example of what is here meant: after a general study of the organization and conduct of banks, two or three lectures by practical bankers on various phases of their work should be followed by visits of students to banking institutions and a clearing-house. Thus the school can be made a part of the commercial world by bringing representatives of the business community into the school, and taking the school into the business community.

Unless one has put the matter to the test, he will be surprised at the sort and amount of the material connected with commercial affairs, that it is possible thus to bring into the school, and this not in any spirit of artificiality, but as an agency in sound instruction. First, there may be a collection of mercantile products, and also documents, bills, invoices, and the like. Business men are very ready to coöperate in furnishing material to modernize instruction. But best of the forces that can come to the school from the outside are members of the business community themselves. Many business men talk readily and interestingly of their work: many who do not speak well at first are very effective when they have the stimulus of questions.

A further illustration of the way in which school life

and real life may be brought into vital union is the educational excursion which has come to be a feature of foreign commercial schools. Of the school at Antwerp, Mr. Sadler says: "The teaching is not all done in the classrooms. The visits paid by the students to docks and factories, under the guidance of professors, and with other expert assistance, are said to be very useful."[1] These excursions are not limited to Antwerp, but embrace visits to a number of the more important centers of Belgian industry. So-called commercial and industrial excursions are made from the French schools. Work along the same line has been undertaken by the Wharton School of the University of Pennsylvania and the Philadelphia High School of Commerce; in both these schools results have been encouraging. Similar experiments have been tried with success at other places. It need hardly be said that these excursions will degenerate into mere picnic jaunts unless they are well planned, properly supervised, and followed up with definite work.

It remains to speak of the actual content of the curriculum, and the interpretation that shall be given to the several subjects of study. For convenience in this presentation the subjects are classified in groups.

English Language and Literature. — English subjects in themselves should occupy a foremost place in schools of commerce, and in addition, accurate, forceful, and graceful expression, both oral and written, should be aimed

[1] *Higher Commercial Education in Antwerp*, etc., p. 15.

at in connection with all other subjects studied. As a minimum the English should include composition writing with attention to spelling, sentence and paragraph structure, more extended essays, an introduction to the history of English (including American) literature, and critical and interpretative readings of the masterpieces of the English language; also the best English translations of world literatures in other languages. In the earlier years the compositions should be brief and of frequent occurrence, to be followed later by more pretentious essays. Two considerations should be regarded: the correlation of English with other subjects of study, and reading extensively, in class and out, of the best literature. Let it be settled that good English form is not to be put on and laid off as one's garb, a particular thing for certain hours or for special functions. Good form must be one's stock-in-trade for daily and hourly use. Great will be the economy of both teacher and taught, incalculable will be the gain, if we shall make every exercise an English exercise, until accurate expression becomes habitual. In some schools, for example, it has been found feasible to have English and history taught by the same instructors. Much of the reading in English is illustrative of historical conditions, and history is in part literary, and descriptive of the background for literary production. Both English and history gain from such a combination, and there is no undoing of results, no retraversing of ground. Too often the arrangement of subjects in curricula makes the progress of pupils like the movements of an army that advances up to a

certain point, and falls back only again to advance and fall back.

The school of commerce should train for fluent, natural, oral expression, either in single sentences or in connected discourse. Business does not need elocutionists or orators, but it does need those who can talk, — and to train men to talk sensibly and convincingly, to the matter in hand, is an important work of the commercial school. Above all, boys should be kept from the notion that they are to make speeches, that they are to conduct controversies based on inadequate information; instead they should be led naturally and informally to present information acquired. The following, from the Prussian code for higher schools, states the case: "Careful attention is to be paid to the cultivation of good oral expression in all subjects and in all stages. But, above all, the teacher himself must set a good example. Any carelessness in this respect exercises a prejudicial influence upon the style of the pupils. Intelligent, expressive reading and recitation by the pupil must be continually practiced. Besides this the pupils in the higher classes at regular intervals prepare beforehand and deliver without notes, short lectures on what they have read or heard. The lectures are afterward criticised by the teacher." [1]

And reading, reading, reading, — reading of great works in school, reading of great works outside of school, for report, this is second in value to no other task which

[1] *Curricula and Programmes of Work for Higher Schools in Prussia*, pp. 16–17.

may be set. The old superstition that English can best be learned through a study of the classics still exists in many quarters, but for the most efficient teaching of English there should be reading of the best of our mother tongue, and the best foreign translations into our mother tongue. Fortunately it is no longer necessary to be restricted to the classic languages to get the best of ancient life. As Superintendent Balliet says in commenting on the high school of the future, it "will teach the classics to those who do not study the classic language. If the ordinary child can have but one, it is much better for him to be led in a critical study of a classic in the translation than to wrestle with the technique of the language and get no appreciation of the classic. A classic in the elegant English of a master is often much better than it is in his own crude and cruel apology for English."[1] The Prussian gymnasia are recognized the world over as superior classical schools, yet translations are recommended in them for wider readings in Greek literature.[2] Says the former English special commissioner, Mr. Sadler: "It is certain that, by means of good translations, a great deal can be done to stimulate interest and pleasure in classical history and literature. Some translations are themselves classical. It has often been remarked in this connection that our English Bible itself is a proof, if one were needed, that a translation may have an

[1] Superintendent Balliet before the Harvard Teachers' Association, 1899. Reported in the *New England Journal of Education*.

[2] *Curricula and Programmes of Work*, etc., p. 25.

immense influence on the style and habit of thought of a nation." [1]

A school of commerce is not to be impoverished in literature; its outlook is broader than spelling and the study of letter writing, though these should not be neglected; here better than anywhere else can be answered the critics who place strictures on the curriculum described. There is nothing in the nature of the case that should make the educational value of literature in a school of commerce lower than that of other schools of the same grade. Here as elsewhere may be studied, "English as a history, as a science, as a joy, and as a tool."

Languages Other than English. — Extended study might be made of at least two modern tongues in addition to English. Local conditions and local demands, however, should be accorded weight in this matter.

A wave of popularity has set to the value of modern languages; this is shown in recent foreign reports which are based on experience, and in the expressions of our own language associations. Repeatedly are we favored with opinions, based on observation and experience, that the educational value of modern languages can be made comparable to that of the ancient languages. Dr. R. P. Scott summed up a discussion before the London Chamber of Commerce Conference on Commercial Education with a statement applicable to the United States as well as England: "There seems agreement that it is possible to have a modern education drawn entirely upon modern

[1] *Problems in Prussian Secondary Education for Boys*, p. 148.

lines, out of which can be got the same discipline of mind, and the same discipline of conduct that can be got out of the old classical languages. They have found that true in Germany, and I am convinced we can find it true in England, if only we can set ourselves to work out the different types of secondary education that this nation should have at its command."[1] But there are other reasons for the study of modern languages than those here given.

The advantages of beginning the study of a foreign language with a living and not a dead tongue have long been urged, and such recommendations may well be regarded, even by those who aim at a familiarity with the latter. For schools of commerce, modern languages should be studied as living languages, that is, as far as practicable through the medium of oral discourse, thus cultivating the ear as well as the eye. In German schools, boys ask and answer questions in the language studied, and English and French visitors are surprised to find that not only are they invited to speak to the students in their native tongue, but that the students follow them.[2] Modern language study in commercial schools will have a decided advantage through international correspondence, commercial and otherwise, between students in different countries.[3]

[1] *Report of Proceedings*, p. 56.

[2] Magnus, London Chamber of Commerce Conference, *Proceedings*, p. 20.

[3] The seventh resolution of the Congress on Secondary Education in Paris (1900) bears on this: "That, inasmuch as the international school correspondence — due originally to private initiative and carried on for more than three years under conditions that have proved to be satisfactory — is an important auxiliary, not only from the point of view of practice in modern

But foreign language instruction to be of greatest value must have a wider outlook than business correspondence, commercial terms, etc. One can but sympathize with the expression of Mr. H. W. Eve before the International Congress on Technical Education, in London, 1897, "a boy who can turn Lessing's Laocoon into good English and a passage of Macaulay into passable German will not take long to learn how to 'apologize for delay in the execution of your esteemed order.'"[1] To summarize in the line suggested by the Rev. C. W. Bourne: (1) a living language should be learned principally through the medium of the ear; (2) a mere "courier" knowledge of a language is not sufficient, coupled with this there must be acquaintance with literature; (3) phonetics of the language studied should be taught; and (4) language should be employed as the instrument of conveying exact thought.[2]

Mathematics. — Of old, Plato regretted the use of "the noble science," arithmetic, in practical affairs; yet from Plato's day to our own, mathematics in all branches have become more and more matters of daily life. A commercial high school will get pupils grounded in general arithmetic; it should furnish an enlargement of the number

languages, but also from the points of view of the general culture of the mind, and of international relations, all school authorities should be urged to encourage by every means in their power the further development of the system." — *School Review*, January, 1901, p. 58.

[1] *Proceedings*, p. 185; see statement on the necessity for special language training, Magnus, *Industrial Education*, pp. 78 *sqq*.

[2] London Chamber of Commerce Conference on Commercial Education, *Proceedings*, p. 10.

concept through a study of algebra, to be followed by plane geometry as a training in logical reasoning, and as giving the principles for measurements. The concluding subject in this group should be mensuration and higher commercial arithmetic, with rigid drill in mental arithmetic. The latter can be made of great practical value as well as an important factor in the educational process.

History. — Four courses at least in history should be distributed throughout the years of the curriculum we are considering, and the following are suggested: (1) general history to 800 A.D. (chiefly Greek and Roman with their Oriental connections); (2) general European history, *post* 800 A.D. (largely English with its continental connections); (3) American history; and (4) industrial and commercial history (chiefly of the United States, England, and Germany, since 1763). In the teaching of history in any secondary school, the process is one of selection, and for this course the selection should be of those facts that illustrate the industrial, commercial, and social aspects of the life of the peoples studied. The geographical basis should be duly emphasized, and a close relation established between history and science and economics.

Science and Geography. — Schools of commerce should be alive to the truth of Huxley's statement, that wealth, national position, influence, "all hang on the thread of applied science." Some years ago an old-time college president asked a young professor of biology if he would begin his teaching of zoölogy with some broad principles of classification, and had the answer that the subject

would be begun with a pail of clams. Science has become a study of things, but not all sorts of *things* are of equal value for scientific study. Clams may be interesting for the time being, and dissection of them has some educational value; yet limiting science to the gross anatomy of types may prove as profitless as were the erstwhile principles of classification. Scientific study needs to pass beyond the "pail-of-clams" period. "We all know what the old-fashioned botany was: partly collecting flowers that were pretty, pressing and mounting them; partly pulling these flowers to pieces and giving technical names to the different parts, finding all the different leaves, naming all their shapes and forms. It was a study of plants without any reference to the soil, to the country, or to growth. In contrast, a real study of plants takes them in their natural environment and in their uses as well, not simply as food, but in all their adaptations to the social life of man."[1] Mineralogy, botany, and zoölogy offer rich stores of materials that may be treated as the products of commerce. Where natural products are secured, their properties, parts of them that are used, etc., should command attention, rather than mere systemic science or comparative anatomy.

A course dealing with raw materials naturally precedes commercial geography, which deals with forces of nature as agents in the production of these, and the manner of their finding their way into the world's trade. Elementary physics and chemistry should be given through a study of

[1] Dewey, *School and Society*, pp. 98–99.

the materials of industry and trade. In a concluding course, there ought to be given the opportunity for a study of chemistry as applied to the arts. Science, in the commercial school, should be a study of the phenomena of everyday life, and to this end the laboratory and the special museum are indispensable. It will be generally agreed that the supreme achievements of science have been in the direction of applying it to practical ends. The science work of foreign commercial schools is largely what may be termed the technology of merchandise (*Waarenkunde* or *Étude des marchandises*). The future will see improved work in our own country in the direction of this applied science.[1]

Closely related to the science, and as a connecting subject between it and economics, is commercial geography. Geography is a universal subject. The geography of commerce gives an opportunity to study commerce in its many relations to the other subjects in the curriculum. Of the more academic studies this probably has the greatest practical value, and already it is receiving wider attention than any other of the more general subjects.

Economics and Political Science. — What passes as phenomena of our political, economic, and social life should have due recognition in schools of commerce; this does not mean that such schools are to aim at the production

[1] "In the language of Mr. Thomas Twining of the Twickenham Economic Museum, 'the thoughtful introduction of science-training of the right sort might, in due time, yield a supply of earnest and intelligent men, working *con amore* at the furtherance of their country's industrial and commercial prosperity.'" — YEATS, *The Golden Gates of Trade*, p. xix.

of political philosophers or sociologists. Theories and abstractions ought to be largely disregarded, methods being historical and descriptive. Local history and government, with industrial organization and activity, may be made the point of contact, and then let the method be from the community out. Problems of production, distribution, exchange, and consumption should be considered concretely. Government, too, needs practical treatment. Field work, observation and report, studies of special trades and industries, etc., offer opportunities for numerous profitable courses.

Studies of the Technique of Business.— Much of the foregoing is general, and it now remains to speak of the subjects which aim at its application. As stated by Dr. Elmer E. Brown, of the University of California, "every man's education should carry him as far up the course of general culture as he can go consistently with his other duties in life; but every man's education should be rounded out with technical training for some definite occupation in life." In no sense will the ideal school of commerce seek to turn out a ready-made business man. Its aim may reasonably be to equip a young man to write well, to familiarize him with current business paper and office practice, to ground him in the principles of accounts, and to give him some notion of the legal regulations for business transactions. Business men frequently declare against teaching too much bookkeeping; they do not want boys fixed in any system of keeping accounts who will come into their offices and tell them their method of keep-

ing books is wrong. Shorthand and typewriting may well find their places, though as Professor Layton says as "useful accomplishments" rather than "educational specialization." The practical utility of shorthand writing is becoming more generally recognized while the typewriter becomes increasingly important as an instrument of commercial procedure and literary activity.[1]

With due regard to the principles above laid down there can be formulated curricula for commercial schools that will furnish an education equal in worth to that given in other schools of a similar grade; in addition, commercial schools and courses will serve the useful purpose of training young people into and not away from the social activities they must follow.

[1] No attempt has been made to arrange the subjects of study above treated either by years and terms, or as required studies and electives. Local conditions will largely govern in this matter. Several curricula are furnished in the Appendix (pp. 309–316). It seems well to caution against the danger of relegating the distinctively commercial work to the third and fourth years. Many of the pupils who need the technical instruction will not be able to complete the four years, and either they will not come or they will not get the training they seek.

The curriculum in the Lowell (Massachusetts) High School follows: —

"First year: algebra, mental arithmetic, commercial geography, penmanship, correspondence, bookkeeping, and English; all prescribed.

"Second year: bookkeeping, commercial law, commercial arithmetic, history, and English, prescribed; French, geometry, physics, elective. One subject from the latter group to be taken.

"Third year: bookkeeping, history, and English, prescribed; stenography and typewriting, French, German, chemistry, physiology and astronomy, elective. From the latter group two electives must be taken.

"Fourth year: stenography and English, prescribed; French, German, chemistry, industrial history, and economics, elective. Two electives must be taken." — CYRUS W. IRISH, *School Review*, September, 1902.

English, modern languages, history, science, and mathematics in a school of commerce can be made fairly equivalent in educational value to a study of these subjects in other groupings or arrangements. Every scheme of education may be liberal, as every scheme may be technical, and the question which those who establish business education must consider is, where shall the line be drawn, how shall the division be made between matters that have technical value and those that have cultural? Industrial and commercial activity have been too little regarded in schemes of higher and secondary studies in this country; a study of and regard for social conditions will lead to more rational plans of instruction, and these, when established, will result in more useful and universal education.[1]

[1] "In addition to the purely intellectual or academic courses, we should offer in every secondary school, whether public or private, courses in manual training and commercial courses, and in some schools courses in agriculture, all of which, together with their general educational aims, minister directly to vocational and social aims. We provide the general literary and scientific training required for intelligent participation in a wide range of the life interests of to-day. Can any one assign a satisfactory reason why we should decline to provide the training in the mechanic arts, and in the fundamental principles and processes of commerce essential to intelligent participation in an equally important range of contemporary life interest? I cannot. Democratic education, that offers equal opportunities to all, must, therefore, in my opini n, provide as adequately for the vocational aims of future artisans, merchants, and farmers as for future professional men." — HANUS, *A Modern School*, p. 29.

CHAPTER IX

Higher Commercial Education in the United States

College education for business men has been repeatedly called in question in the United States. Men of affairs who have had to do with those trained in different ways have often pronounced against the conventional college course for those who are to enter upon commercial pursuits. At the same time these men have recognized the value of higher technical education in engineering. Two tendencies are to be observed in higher education during the last twenty years. The first is the liberalizing and modernizing of the curriculum; this is shown in the substitution of modern languages, science, and economics for the old-time Greek, Latin, and mathematics. The second tendency is an enlargement of the conception of business education. Most of the criticism directed against a college course for business men miscarries when applied to the modern college or to the college of commerce. Some of the men who have been crying out against the old college education have given generously for the establishment of the newer colleges. The college of commerce is made necessary by enlarged commercial operations and the demands of our public service; the success of higher technical education in other directions warrants the inaugu-

ration of advanced commercial work ; the desire to extend the benefits of advanced training to as many as possible requires this appeal to prospective business men. Already this form of education is so well established in the United States that it may almost be said to have passed the stage of experiment.

The Wharton School. — The first of the institutions to give commercial education of college or university grade in the United States was the University of Pennsylvania in its Wharton School of Finance and Economy. This School was founded on a gift by Mr. Joseph Wharton, a Philadelphia manufacturer. The purposes of Mr. Wharton were stated as follows: to give an adequate education in the principles underlying successful civil government, and to furnish a training suitable for those who intend to engage in business, or to undertake the management of property. The founder of the School enlarged upon his plan, saying that it was his aim "to provide for young men special means of training and correct instruction in the knowledge and in the arts of modern finance and economy, both public and private, in order that, being well informed and free from delusions on these important subjects, they may either serve the community skillfully, as well as faithfully, in offices of trust, or, remaining in private life, they may prudently manage their own affairs and aid in maintaining sound financial morality ; in short, to establish means for imparting a liberal education in all matters concerning finance and economy." [1]

[1] Wharton, *Is a College Education Advantageous*, etc., p. 29.

In 1881 the Wharton School was opened, much as an advanced collegiate department. Down to 1895 but two years of collegiate work were given, students being asked to elect at the beginning of the junior year. In these years the course was quite rigid and gave a strong emphasis to economics and politics. In 1895 a full four-year curriculum was introduced; this included in its earlier years, subjects that duplicated work in the college, introduced different branches of geography as new subjects, and added other courses in economics and politics. The new courses last named were mainly concrete and inductive.

Later developments of the college department at Pennsylvania have made it necessary that the Wharton School adopt a different form of organization. The courses mentioned in the preceding paragraph have been retained and the unit system applied. Studies are now classed as required, required electives, and free electives.

Edmund J. James was called to a professorship in the Wharton School early in its history. His knowledge of European commercial schools, his training in economics, and his aggressive leadership made him a positive force in this School and in the country at large. His repeated addresses before the American Bankers' Association and other commercial bodies, and before conventions of educators, and his notable report on Education of Business Men in Europe, made Professor James a pioneer. The Wharton School has trained many men who have gone out to be teachers and educational leaders elsewhere,

and it has also furnished a goodly number to the public service.

For long the Wharton School was limited in its accomplishment by insufficient endowment. The original gift of $100,000 was later increased to $250,000. More recently, Mr. Wharton has added another $250,000 to the permanent endowment, and in addition he has given the site for a building. He also signifies his intention of constructing an independent building, this building to be specially adapted to the School's work. The cost of the building and site are estimated at $240,000, so it can be seen that the founder is dealing most generously with his School. The new endowment with a separate building will open a new era in the history of the Wharton School.

The middle West has come to leadership in rendering higher education democratic in the United States. In its all-aroundness of development, Mr. Mosely, of the English Commission, thought he detected the same relative advantages of education in the middle West when compared with the East that there are when the East is compared with England. In the development of education in the middle West higher schools of commerce have been a result of freedom in elective studies and of the coördination of professional work with the more general college course.[1]

The University of Wisconsin. — It was in connection with the University of Wisconsin that an early definite suggestion was made for a college of commerce. This was

[1] Turner, "Education in the Middle West," *World's Work*, August, 1903.

by Robert C. Spencer of Milwaukee in 1866, and was addressed to the president of the Regents of the University. Mr. Spencer wrote that the interests and relations of commerce made necessary the provision of a system of education peculiar to commerce, which should be in addition to the common and fundamental education. As a citizen of Wisconsin, Mr. Spencer expressed an interest in the reorganization of the University, and after noting with approval the provisions being made for the training of teachers and for giving instruction in agriculture, he added: "The learned professions will be provided for, and commerce will not be overlooked. As the handmaid and munificent patron of all the industries, arts, and interests of advancing civilization, she cannot long be passed by with indifferent attentions or superficial and temporary provisions for her vast educational wants." The writer of this letter expressed his willingness to aid in inaugurating the plan of instruction recommended. He gauged his community in the following statement: "I believe that the Chamber of Commerce of Milwaukee and the body of merchants and business men of this city will esteem it a privilege to lend their coöperation and supply the means to insure the highest success of your efforts in a measure so vital to the dignity and best achievements of commercial life." Mr. Spencer concluded this remarkable letter with an appeal to civic pride: "Finally, I beg leave to suggest that the early action of your honorable board in the direction alluded to would probably result in inaugurating similar action in other states, which would doubtless eventuate in a great

national system of liberal commercial education, and thus operate in giving to our country and the world a class of commercial men whose influence on all the interests of society would be potent."

But Robert Spencer piped to those who would not dance, and it was many years before his suggestion was acted upon. The experiment for higher commercial education at Wisconsin was not inaugurated until 1900. Plans of organization at the University made it easy to establish the new department as a distinct "school," with its independent curriculum. It would seem that at Wisconsin there is a rational blending of the element which may be termed "liberal" with that termed "professional"; also that there is a judicious balancing of required and elective studies. Of the curriculum given on pages 316–317, practically all the studies of the first two years are required. The group itself is an elective. One-half of the work in the junior year is elective, as is considerably more than half of that in the senior year. But these are not all the admirable features of the Wisconsin scheme. Students are required to make group electives, specializing in preparation for particular commercial careers. Four groups are offered for election in 1904: money and banking, transportation, manufacturing industries, and the consular service. Those who complete the requirements of the School are given a baccalaureate degree.

Ideals for higher schools of commerce are thus stated by the director of the School at Wisconsin: (1) to give familiarity with the nature and workings of the industrial

organism. This is to be attempted through general lines of study, particularly those dealing with commercial geography, economics and industrial history, transportation, money and banking, and business organization and management; (2) in the next place these schools are advised to furnish an acquaintance with the articles of commerce and the various industrial processes through which the most common of these pass; (3) a series of courses are suggested dealing with various branches of law, as commercial law, tariff legislation, and special legislation pertaining to labor, capital, corporations, etc.; (4) training in languages; and (5) the physical and chemical sciences. The preceding are recommended for all students. In addition the suggestion is for special election of some related group of subjects.

The University of Wisconsin fairly embodies the ideal above set forth. At the inauguration of its School of Commerce the director made the following statement of the University's policy, and the reasons which lay back of it: "We propose to place this new course on the same level with the other courses in the Colleges of Letters, Science, and Engineering. * * * We expect to keep in mind that the young man who is to do business on a large scale needs to be educated in the best sense of the term, as well as equipped with the technical knowledge which the prosecution of his business requires."[1]

The School of Commerce at Madison is thus dedicated

[1] Scott, "Technical Education of Business Men," *Railroad Gazette*, October 5, 1900.

to the proposition that the business man needs a college education adapted to his peculiar needs. The School promptly disclaimed any attempt to furnish complete knowledge about either commerce or industry. On the positive side it aims to give "such training and knowledge of the structure and workings of the industrial organism as will enable students to learn the technique of any business in much less time than would otherwise be required, and to attain a degree of industrial and social efficiency which is impossible for the average man who goes into business without such preliminary training."

University of California. — The University of California seems to have been the first of the higher institutions in the United States to adopt the name and the idea of a college of commerce. A clearly defined beginning dates back to 1898; but for some years there were few students in the College, and it was an experiment of which there was some question of success. For example, the biennial report of the president of the University for 1898–1900 contained the following: "The work of the College of Commerce, as outlined in the curriculum adopted by the faculty, does not include a sufficient amount of work characteristic of commercial activities. The faculty has intended a thorough revision of its curriculum, but until the funds of the University or the special equipment of this school make it possible to add a number of chairs for the teaching of practical subjects, it is feared that the College will not fulfill its highest opportunity." In 1899

there were no degrees conferred for work in this College; in 1900 there were but three.

More recently the prospects for this department have materially improved. Its proportion of undergraduates of the University increased from .2 per cent in 1898 to 2.5 per cent in 1902. In the entrances for the year 1902–1903 this College claimed 4.6 per cent of the total, and the comment of the president of the University was, "The development of this College will undoubtedly be rapid." The report of the president now is, "The work of the College gradually takes shape as new instructors are obtained and new opportunities are opened."

The aim of the College is threefold: (1) to furnish a certain amount of culture work which is itself the mark of a college training and which gives opportunity for mental discipline; (2) to supply an equipment in languages, economics, methods of research, and knowledge of business organization; these studies are regarded as "the essential mental tools for the business man"; they lead to the third purpose of the College; (3) "an opportunity to acquire some knowledge of a particular line of trade."

Students are required to be at least sixteen years of age at admission. A scholarship preparation that insures fitness for the work of the College is also demanded. The announcement is made that although bookkeeping is not included in the list of prescribed studies for admission, candidates are better prepared by having a good working knowledge of this subject.

The course is for four years and is made up of 120

units of work. As studies are arranged there is practically no "free election." Sixty-five units of work are required with tolerable definiteness. These are termed "elementary," and they are demanded with a view of preparation for taking up the more technical studies which are to follow. The required studies include English, modern languages, mathematics, history, economics, and geography. Required studies, however, are interpreted very liberally. Thus, eighteen units in modern languages are required, but these may be selected from a long list of courses in Chinese, Japanese, Russian, German, French, Spanish, and Italian. The outlook of a section and the principle of suiting a curriculum to local needs are well illustrated in the provisions for language study at the University of California.

The remaining fifty-five units are in two classes: (1) a group termed "technical," the studies of which are in part practical economics and in part jurisprudence, including commercial, industrial, and international law; and (2) some group of subjects devoted to a special field.

Students are required to complete the so-called elementary work by the end of the junior year. They may begin some of the technical studies in the sophomore year, but it is expected that the first two years will be devoted to the general work and the last two to the special. By the liberal interpretation of required work in geography and economics, and by the freedom given to elect subjects not in the required list, students may take certain technical subjects during the first two years. This program of

studies seems more elastic than that at the University of Wisconsin; but as it would work out in particular cases, it is likely very similar.

University of Chicago. — The College of Commerce at the University of Chicago is organized with a separate faculty and has a separate administrative officer. It is, however, an organic part of the University and is subject to the general regulations of the University senate. In many particulars the plan at Chicago is similar to that at Madison, but with a freer elective system, and a less definitely wrought out scheme of studies. At the University of Chicago, commerce students are classed as those of the junior college and of the senior college. The former, in general, includes students of modern languages, English, history, mathematics, science, economics, and civil government. Of the eighteen units of work required in the junior college, one is in commercial geography and one a free elective. In the senior college there are also eighteen units of work, of which approximately fifteen are required and three are elective. The required studies of the senior college are in one of three groups: either banking, or transportation, or trade and industry. Opportunity is also offered at the Chicago College of Commerce to specialize in journalism. Those who satisfactorily complete the course as above described are given the Bachelor of Philosophy degree.

One notable feature of the Chicago scheme is the arrangement of special lectures by practical men. Some of these are single lectures, but they are often in a short

course where the same man gives two or three. Even in case of the single lectures the plan has been to furnish a sequence by arrangement into groups. Transportation, industrial organization and management, technique of commerce, the diplomatic and consular service, are some of the general titles for these lectures. The value of such lectures in schools of commerce can scarcely be over-emphasized, for by them the prospective business man comes in touch with leaders in various lines of business activity. Among those who have thus lectured at the University of Chicago are David J. Hill, S. N. D. North, Frederick W. Holls, A. C. Bartlett, Franklin H. Head, and J. H. Eckels. The dean of the College has widened the value of these lectures by editing a collection of them.[1]

University of Michigan. — A slightly different plan of organization is that at the University of Michigan. Here higher commercial education is not furnished in a separate "school," but as a division of the department of literature, science, and the arts. In the development of commercial education, the University of Michigan has followed a plan originally adopted to give a joint literary and law course, or literary and medical course. Students are admitted into the college proper and take general courses for two years. Those who have decided to enter upon the commercial studies in the third year are, however, requested to advise with those in charge of the commercial work in selecting their studies for the first two years. At the beginning of the third year, candidates enter upon the special work

[1] First volume, University of Chicago Press, 1904.

and continue for two years, when they are given the Bachelor of Arts degree. After an additional year the Master of Arts degree is conferred.

Economic studies are made more important at Michigan than at many of the other institutions giving higher commercial education in this country; foreign languages have relatively less emphasis than in many other higher schools of commerce. The University of Michigan was not content with "labeling old courses with a new name." Special instruction has been provided in commercial law, economic geography, commercial and industrial history, the application of chemistry, physics, and mechanics to industrial undertakings, the science of accounts, the organization and administration of industries, private and corporation finance. The studies of the first and second years (third and fourth years at the University) are more general, and are announced as "adapted to the needs of all young men intending to enter business." The third year is given to more special studies along narrower lines. Departments announced for special study are market organization, foreign trade, transportation, insurance, money, banking and finance, and the application of science to industry. The full program of studies for the three years is given on pages 317–319.

The Michigan Conference. — An important meeting in the interests of higher commercial education in the United States was a convention of educators and business men at the University of Michigan, in February, 1903. The conference was arranged for and held under the auspices of

the Michigan Political Science Association. The opening address was by President Edmund J. James, of Northwestern University, on "Recent Tendencies in Education as a Result of Social and Industrial Changes." The address by President James was introductory; its value to the meeting was that it placed upon colleges and universities the necessity of providing a better type of education for business men. In the second day's program the morning was termed the Educators' Session, at which three papers were read. Professor Scott, of the University of Wisconsin, gave the first under the title "The Place of Commercial Education in a College Course." Professor Scott laid down as fundamental that commercial education can be adapted to different grades of schools and to students in various stages of development. He contended that we may properly have commercial instruction in the post-graduate courses of universities, in the undergraduate college courses, and in secondary schools. (At the closing session of the meeting, Professor Dewey, of the Massachusetts Institute, further emphasized the same principle.) Professor Scott devoted himself chiefly to the question of the four-year undergraduate course in a college of commerce. As was said in the concluding discussion, his classification of students was so comprehensive, and his arguments were so well fortified, that one could but agree with him. Professor Scott was followed by Cheesman A. Herrick, of the Philadelphia Central High School, with a paper on the "Coördination of High School and University Instruction in Commercial Education." Dr. Edward D.

Jones, of the University of Michigan, next read a suggestive paper on "The Function of the Business Community in Higher Commercial Education." Dr. Jones dealt with such practical questions as excursions of students, student apprenticeship in business houses, lectures from business men, use of trade journals, and collection and use of museums of commercial products.

What was termed the Business Men's Session followed. The question set was, "What can a University contribute to prepare for Business Life?" This was responded to first by Mr. Edwin H. Abbott, who spoke as a transporter, he having been for thirty years connected with the Wisconsin Central Railway. The reply of the wholesale merchant was made by Mr. A. C. Bartlett, of the Hibbard, Spencer, and Bartlett Hardware Company, Chicago. James B. Dill, Esq., of New York, followed with what was termed the "Reply of a Corporation Lawyer." As entertaining speeches the three addresses of this session were highly successful; but as contributions toward solving the problems for which the conference was called, they were of less value. It seemed that the speakers mistook the purposes of the meeting, and instead of dealing with a newer and better preparation for business life, they dealt too largely in platitudes justifying the conventional college education. No doubt a correct explanation of the Business Men's Session was given in the closing discussion; it was a case of mistaken emphasis.

In the evening of the same day four papers were read, that of Professor Thurston, of Cornell, "To what Extent

and in what Way shall Students of Commerce Study Science," a subject which was further continued by Professor Carhart of Michigan; papers, on "Commercial Education and the Foreign Service," were also given by Professor George M. Fisk, of the University of Illinois, and Professor James C. Monaghan, of the University of Wisconsin. The science discussion was almost entirely in the field of technology or engineering, and ignored the experience of European schools of commerce in the study of commercial products (*Waarenkunde* and *Étude des marchandises*). This was another case of mistaken emphasis, or if it was not, the best form of higher commercial education is that given by a school of engineering with what was termed in one of the closing discussions "a commercial finish." In answer to the view of the papers it may be said that commercial schools should have some general science study, also something from the field of engineering, but that they need their distinctive work in dealing with the materials of commerce.

Professors Fisk and Monaghan spoke out of their own experience, as both have been in the foreign service; the former dealt most largely with the diplomatic service, and the latter with the consular service. They, however, did not confine themselves to these phases of the question, and the comments of Professor Monaghan on German education were particularly suggestive.

The closing session of the conference was given over to discussion. The men assigned to open were Dr. Hatfield, of the University of Chicago, and Professor Schoch,

of Drexel Institute, Philadelphia. Following these gentlemen was a general discussion participated in by Professors Dewey of Massachusetts Institute, Ripley of Harvard, Loos of Iowa, Robinson of Illinois, Sisson of Bradley Polytechnic, Adams of Michigan, and others.

It is difficult to formulate the conclusions of the conference, but at least three things appeared to pass by common consent: (1) different grades of commercial instruction may be suited to the needs of different classes, and to this end at least three sorts of institutions should be provided, — high schools of commerce, colleges of commerce, and post-graduate schools of commerce; (2) for the first two institutions, technical and special elements should not too much exclude the general and cultural work (a proportion given for the college of commerce was sixty per cent of general work and forty per cent of special); and (3) the traditions and conditions of each community and institution must largely guide in dealing with its local problem.

University of Illinois. — Beginning with the autumn of 1902 the State University of Illinois has furnished instruction along the lines of commerce and industry with special regard for the needs of those who are to go into business. Commercial courses in this institution are made a part of the college of literature and arts, and lead to the Bachelor of Arts degree. In the main the new courses have been put under the department of economics of the University.

The first demand is the work prescribed for all who are in the college; this consists of English literature and rhetoric, algebra, geometry, and trigonometry, German or

French, and natural science. The required work does not require the student's full time for the first two years, and he is given the opportunity for election of special subjects, but he must complete the required work before entering on the third year. The second demand is for the work required of all students in industry and commerce, and the third for specialization along narrower lines. The courses demanded of all matriculates in commerce and industry are in the direction of economics, history, and geography. Specialization may be along any one of five lines: (1) general business training; (2) banking; (3) transportation (especially railway); (4) journalism; (5) insurance. Besides giving training to those who make a specialty of commercial work, the University of Illinois has aimed to make the courses in commerce and industry attractive as electives to students in agriculture and engineering. Business organization and administration are thus made to better equip the practical agriculturist or engineer.

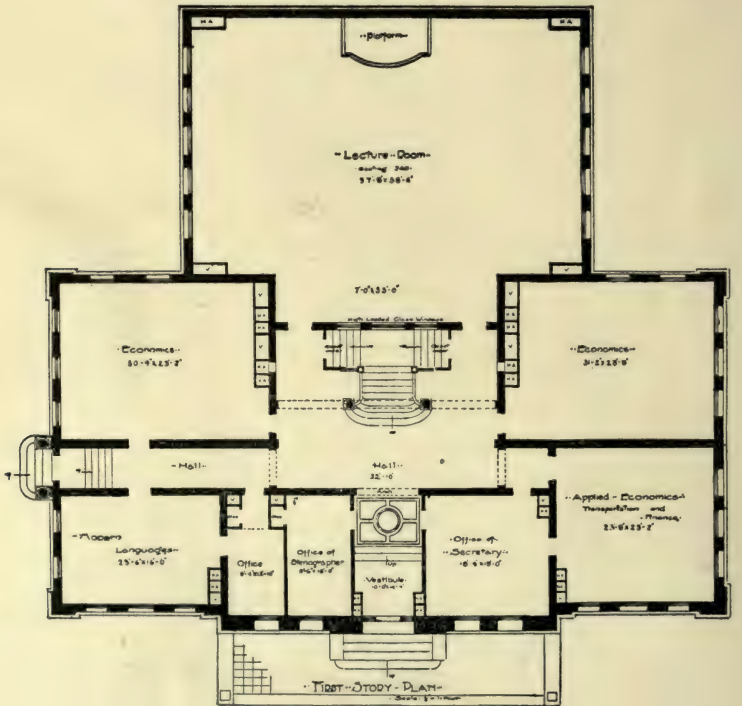
University of Vermont. — In 1900, Mr. John H. Converse endowed a department of commerce and economics at the University of Vermont. Though the work has been in operation for some years, it is still regarded as in process of formation. Present plans are to admit students into the two upper years of the college course, the only requirement being that French, German, and history shall have been taken in the two years preceding. Thus far there is little to distinguish the work of this department from that in the modern languages and applied economics at other universities.

Dartmouth College. — The Amos Tuck School of Administration and Finance was founded at Dartmouth College in 1900. It was given at the outset an endowment of $300,000 by Mr. Edward Tuck, an alumnus of the College, and is named in honor of Mr. Tuck's father. Subsequently the founder gave an additional $100,000 for a building to serve as the center of the School's work. The Tuck School is so distinctive in its organization that it is sometimes referred to as "the Dartmouth plan" for furnishing commercial education.

For admission, students must be college graduates, or at least have completed three years of undergraduate study. In general the preparation required is: the usual college requirements in mathematics, the sciences, literature, and philosophy; elementary courses in two of the following, French, German, and Spanish; two years' work in English composition or argumentation; general history of Europe, representing one year's work; elements of economics, industrial history, and the elements of commercial geography; one course in sociology or in political science, or an additional course in history. Other work may be accepted as equivalents for the above requirements. Also, persons who are prepared to take particular courses may be admitted as special students, and such students are given a certificate for the work actually accomplished.

As originally planned, the Tuck School was for the seniors of Dartmouth College and for one additional year of study. After having been three years in the College, students are admitted as above described, and on comple-

TUCK SCHOOL, DARTMOUTH COLLEGE.
(In process of construction.)



tion of the first year in the Tuck School are graduated with the baccalaureate degree for which they entered. After a second year in the School they are graduated with the degree of Master of Commercial Science. Up to 1904 the senior year at Dartmouth and the first year in the Tuck School have overlapped; but the tendency is to separate the work of the college proper from that of the school of commerce, and a recent report states that this is the beginning of a movement which may result in making both years of the Tuck School entirely independent. The completion of the new building (1904), devoted exclusively to the School's uses, will tend still further to the separation of the Tuck School from the College proper.

The curriculum of the Tuck School is given on pages 319–323; students are required to elect eighteen hours for the first year. For the first year elections are considerably restricted, for the second year far less so. The aim of the first year is to take the more general phases of the subjects of study, reserving the emphasis on the practical aspects of them for the second year. Occasional lectures and more extended courses by practical men are a feature in the Tuck School program.

The Tuck School has adopted the graduate ideal. With the traditional college course shortened by one year it offers post-graduate study preparatory to business in much the way that professional study is offered to those preparing for the law or the ministry. The ideal is high. This puts higher commercial education on a professional basis, and in regard to preliminary preparation probably requires

more than is required in any other of the higher schools of commerce in either Europe or America. The features of the Dartmouth plan can best be seen by comparing it with the arrangement of studies at the Wharton School or in the School of Commerce at the University of Wisconsin. In the latter institutions, commercial instruction is given three years earlier. The question yet to be answered is whether higher commercial education can best serve its constituency by following the usual college course or by being introduced into that course. Thus far the opinion seems quite strong against the Dartmouth plan being made the rule for other institutions.[1] It is probable, however, that different types of higher schools of commerce can be developed by different institutions.

New York University School of Commerce, Accounts, and Finance. — Another school of higher commercial studies markedly different from the preceding is that at New York University. This is distinctively professional in character; as its sponsors say, "it is in no way to be confounded with or substituted for the course of liberal culture in a college of arts and science." The New York University School was a natural outgrowth of the Certified Public Accountants' Association, and its first object was to prepare men for the profession of accountancy. Accountancy had already been placed on the basis of a profession in New York State, requiring that all who are to practice it shall pass a formal examination and be duly

[1] See discussion of James, Dixon, and Scott, before annual meeting of the American Economic Association for 1900.

licensed. Work was begun in October, 1900, with the late Charles W. Haskins as dean and moving spirit. Later the scope of the school has been widened, and now there are two regular courses: *accounting* and *commerce and finance*. The minimum requirement for admission is graduation from a high school of good standing. Those regularly admitted are given the degree of Bachelor of Commercial Science on the completion of three years' work. Persons above twenty-one years of age, who can give evidence of fitness to pursue the studies, are admitted as special students. A certificate is furnished for this special work.

The school of Commerce, Accounts, and Finance is essentially practical; a glance at its scheme of studies (pp. 323–325) shows that they are narrowly vocational. Its students are largely men who are already engaged in some business occupation, and who are seeking to better their equipment. The instruction is mainly by practical men who are engaged with the lines of work on which they lecture. Heretofore sessions of the school have been from eight to ten o'clock, five nights a week, but at the time of writing, a movement is under way to furnish day instruction. This is essentially a professional school. It is doing a useful work, though it is not clear that the idea for which it stands could be so successfully developed in other communities as it has been in New York.

Other Institutions. — The preceding account by no means exhausts the list of institutions for giving higher commercial education in the United States. There are

other colleges and universities with departments and schools of commerce independently organized, and carrying on work worthy of note. But the institutions selected, it is believed, are typical.[1]

In addition to the special departments just referred to, much that might be denominated higher commercial education is given in general courses. Under a liberal elective system, Harvard, Yale, Columbia, Cornell, Johns Hopkins, Northwestern, and many other institutions give courses in history, economics, modern languages, and geography not unlike similar courses in the special schools of commerce. Several other higher institutions are planning for a better organization of their practical courses and the correlation of these around the commercial idea. Harvard and Columbia are especially fortunate in their location, and the opportunity is offered them to do a work of as great, or greater, interest than has yet been done in the United States. Several years ago the Columbia authorities formulated plans for a college of commerce and declared their intention of founding such an institution. Higher commercial education has a hopeful outlook in the United States. It is but a logical step in the direction of modernizing and rendering more useful our system of higher education.

[1] For further treatment of this subject, see "Higher Commercial Education," in Report of United States Commissioner of Education, 1901.

CHAPTER X

Commercial Education: How Provided

Conclusion

The chapters which precede make a statement first, of the economic and educational situation; this is followed by an account of what is being done to meet this situation both in Europe and America. It yet remains to gather up the discussion and deduce the conclusions which may be of service in further dealing with education looking to business life.

Three Sorts of Institutions Needed. — Whether one regards existing conditions that create a demand for business education or some ideal state, three sorts of institutions are needed to cover the field, and to articulate with educational organization. When we regard those for whom plans are made — and what more rational principle as a guide? — it is found that they are of three classes: (1) those who are compelled to take positions at fourteen or fifteen years, who at the best complete the course of the elementary school through the grammar school, and some of whom can give a brief additional time to preparation for their life work; (2) those who can give three or four additional years to training, who are able to complete the course of the secondary school; and (3) those who can

give yet other years to higher training. To each of the above classes the community owes a debt, and for each provision should be made. There should, then, be three sorts of business institutions: (1) some form of technical day or evening continuation school; (2) schools of commerce of the secondary grade; and (3) higher institutions devoted to advanced work more highly specialized. Our industrial and commercial future requires these three kinds of schools. Some have written as though all that is necessary is to train "captains of industry," but there should be special training all along the line so that the nation may advance as an "invincible phalanx."

In working out the above plans certain principles should be kept in mind: (1) successful specialization is not possible in the elementary school; (2) society has not discharged its educational obligation to those who are compelled to withdraw from the elementary school if it abandons them as educational outcasts; (3) secondary education needs modification, but special should not overshadow general instruction in secondary schools; (4) a wider study of some branch of business, or more narrow special training, should be given in institutions of the higher grade; and (5) the aim should be to carry a larger number of pupils from the elementary to the secondary, and from the secondary to the higher, institutions.

The proposal for the institutions herein recommended immediately runs counter to existing beliefs so strong that they may be termed prejudices. Any argument for the addition of a new element into our education must of neces-

sity encounter opposition, for it appears to be an arraignment of that which is established. Those who stand for and are products of the educational régime now obtaining, feel that it must needs be defended at their hands. Education is thus the slowest of all forms of social activity in adapting itself to new conditions. President Eliot has gracefully said, that proposals to change the existing order of education can but offend all who are conservative, and further, that educators as a class are conservative, for with them it is a common belief that the "subjects in which they themselves were instructed" are "indispensable." As teachers, we are all trying to lead others to see the truth as we think we see it, and as Professor Patten says, "the *new education* has been heralded numberless times; in fact, it is always with us, and yet the predicted revolution has not come, and we are still following the traditional lines of education with such slight exceptions, that it would be difficult to enumerate any clearly defined principle which our age has brought forth." It is with extreme difficulty that a new subject can gain a place in the magic circle of the liberal. Because of this tendency to perpetuate itself, education is constantly menaced by the likelihood to "crystallize." Educational progress is not unlike the progress of physical science or of theology. When Copernicus came forward with the helioconcentric theory of the solar system, he was discredited because, perforce, if his theory were true, all former teaching was at fault. Witchcraft kept its hold long after it might otherwise have disappeared, because should witchcraft be acknowledged

wrong, then the numbers it had put to death would be considered as murdered.

Whether commercial instruction is to be furnished in new institutions, or added on in those already existing, it need not be hostile to the education that now is. To break with existing education would be as fatal as it would be unwise. Established education is a "priceless heritage" wrought out by the patient intellectual effort of the ages. "A great educational tradition," says Mr. Sadler, "is one of the most precious things in the world. The history of education teaches no lesson so frankly as this — that reform is always possible, but that sudden revolution is disastrous." Commercial education should not be thought of as antagonistic to existing forms of education, but rather as a means of supplying a new demand of the times, and as such, a supplement to the educational machinery already in operation; it is an appeal to a new class and an attempt to satisfy a demand hitherto not met.

Securing Commercial Schools. — Under American conditions educational progress is necessarily slow. Each community must make its own provision, and each community must, therefore, be led to see the necessity of new forms or improved methods of instruction, and to make the sacrifice to secure them. Under European conditions, a minister of education can often by a proclamation effect changes and get favorable results directly, but in America we realize progress by more tedious steps. In education as in politics, however, the very slowness of our movements is a protection against hasty or ill-advised action.

Unquestioned gains there are from strong central control, but the absence of this makes possible a regard for local needs and the conducting of individual experiments. Unquestionably in France, and perhaps in Germany, there is too little freedom and variety in the commercial schools. In dealing with the problem of commercial education, America as compared with the Old World has less of restriction of tradition and the absence of bureaucratic control; on the whole this can but be of advantage.[1]

There are various ways in which commercial education might be organized and established. First, by private initiative — a method made familiar by the history of the academy of a generation ago. Such, indeed, is the manner by which many of the famous schools of commerce in Europe have been built up, but in many cases as, for example, the Superior School at Paris and the Merchants' School at Crefeld, this form of control has passed into the next, in which the support of commercial schools is in part from boards of trade and other merchant bodies and in part from public funds. This is at present the most common method of organizing and supporting the

[1] "In every type of school, strenuous American teachers are endeavoring to tear out the non-essentials. Don't be cumbered up with a lot of unnecessary luggage in education,' the American teacher pleads, 'cut down your transport; don't make your pupils carry an ounce of unnecessary weight; confine yourself to the essentials; revise all your old traditions; lop away all superfluities. There is so much that a man ought to know that we must reduce the cost of the production of knowledge to the lowest possible figure by employing labor-saving appliances in education, and by avoiding to the utmost the waste of precious time.'" — Michael E. Sadler, "Impressions of American Education," *Educational Review*, March, 1903.

European schools of commerce. In the third instance, these schools might be established by the community as a part of the system of public education, and this has already been done in many American cities. Our educational history and present tendencies impel to the opinion that the latter is the way in which commercial schools will be most largely furnished in this country.

In the experiments that must precede the establishment of separate schools of commerce which are assured of the largest success, private institutions on an independent basis would seem to have certain advantages. As pointed out by Professor James, the routine and formalism of the public schools are against the experimenting necessary to work out the problems of organization and curricula. There can be little doubt but that there would be advantages in the establishment of a commercial school with a liberal support from some individual or corporation, in which the experiments might be made and from which suggestions could be given to public institutions. Such was the plan on which the Chicago Manual Training School was projected. The Commercial Club of Chicago subscribed to stock; Dr. Belfield was selected as director, and sent abroad as an investigator, and the intelligent conception of and expression concerning manual training that came from Chicago were of great service to this phase of education in its formative period. In the discussion on commercial education before the International Congress on Technical Education (1897), M. Jacques Siegfried declared that order would come out of the

confusion then in England by the Chamber of Commerce establishing one school of each type, elementary, secondary, and higher, to serve as models. Repeated favorable reference to this suggestion showed that it was thought not wide of the mark. There is less likelihood of chambers of commerce undertaking such a plan as is above suggested in this country than there is of their doing so in Europe, and our dependence must be largely upon public education. A service of very great value would be rendered if chambers of commerce or boards of public education would send alert young men, who are trained observers, to European centers of commercial education and commercial activity, that they might broaden our notion of the needs and possibilities of business training. Such was the policy of the American Bankers' Association in sending Professor James abroad in 1892. The report of that investigation was no slight gain to the cause of practical education in this country; but we need many such reports on the general and special phases of the question, and, above all, we need men who shall have the knowledge and the enthusiasm that come from personal contact with trade conditions and establish business schools. It is a pleasure to record that some of our universities have already sent men abroad for such investigations as are here mentioned.[1]

Equipment for Commercial Schools. — It is a mistake to feel that palatial buildings, costly apparatus, and liberal

[1] Traveling scholarships have been provided in several of the European countries.

endowment are a requisite to inaugurate commercial education. Under this head again German practice has a significant lesson. With them technical schools of all sorts are, in most cases, in buildings simple and unpretentious, and their material equipment is inexpensive. Mr. Search has shown that often an old mill or abandoned castle is fitted up, and in such quarters the German schools inaugurate their work and demonstrate their worth. For example, the Leipzig *Handelshochschule*, which is one of the promising commercial school experiments of recent years, began its work without buildings and with no independent teaching staff. The *aula* of Leipzig University was utilized, and the teachers came from the Middle School of Commerce and the University. For their extra hours the instructors receive fees, but the whole scheme of the Leipzig school was launched on a yearly guarantee of $2000 ($1250 by the Leipzig Chamber of Commerce and $750 by the Saxon government). In addition there were the returns from the nominal fee of $50 per year for each student. To us it is almost beyond belief that a school of so genuine worth, and which immediately proved of so profound influence, could be established on what we would think insufficient to make the first step toward such a project. Yet we are reminded that there are exceptions to our usual practice, one of the most striking of which is the Philadelphia Textile School. Mr. Theodore C. Search, with a firm belief in the idea for which this school stands, began to teach a group of men in the evening, and, practically unaided, created a most useful institution. For edu-

cational work of all kinds in this country we need money, but we also need a wise oversight and judicious expenditure of what is given.

Industrial education in this country has felt that costly equipment is necessary to produce results. Manual training schools with us have much more elaborate apparatus than have similar institutions on the other side.[1] Foreign visitors have been much impressed with the paraphernalia of our business colleges, and of some of the business college high schools. Mr. Bernard de Bear, in a paper before the International Congress on Technical Education in 1897, gave this trenchant criticism of our business education: "If I might be permitted to crystallize into one sentence my criticism of American business training methods, I should say there were much to gratify the eye and to make an attractive display; but the great outlay involved in all this ornamentation and lavish expenditure on mahogany, plate glass, and gilding, prevented the employ of a staff of teachers adequate to the purpose and able to carry out what is so desirable, but what in America is found to be but a mere figure of speech, namely, strictly individual instruction."[2]

Commercial Museum. — A new type of science is to be given in schools of commerce. Animal, vegetable, and

[1] "The colossal mechanical appliances for testing the strength of materials, etc. (to be seen in the Chicago, St. Louis, Toledo, and Philadelphia schools), dwarf into insignificance the relatively meagre equipments of the foreign schools of this class." — "Industrial Education," *Eighth Annual Report of Commissioner of Labor*, p. 18.

[2] Report of United States Commissioner of Education, 1897–1898, p. 330.

mineral products are to be studied as the materials of commerce, and to this end a special, though inexpensive, laboratory equipment is needed, also a collection of raw materials and of materials in the various stages of manufacture. Such a collection can be readily obtained in any industrial center. In every school of commerce there should be an experimental laboratory attached to a museum of trade products, for, of all the work in such a school, science must be most pronouncedly a study of things. Prevailing notions of material and equipment for science study are dangerous if they govern in the equipment of the new schools; we need a different sort of material and different facilities for handling it.

A study of commercial products as the "technology of merchandise" should be substituted for the natural history of other courses or schools. As was seen above (p. 250), it is a subject which coördinates closely with commercial geography. In the foreign schools the materials for the museum are generally obtained from the chambers of commerce or resident merchants. One familiar with the foreign experience describes the museums as follows: —

> "The specimens are carefully selected with a view to their educational value. They generally comprise samples of some of the principal raw materials used in commerce in their natural state, and as met with in trade. These are carefully classified and arranged. The museum also contains various substances, principally local, as altered by different processes of manufacture; diagrams and models illustrating the diseases to which substances of vegetable and animal growth are liable; specimens showing the

effect of adulteration, and the differences between genuine goods and their counterfeits, and a variety of other things too numerous to mention. Every opportunity is afforded to the students, by the actual handling and tasting of the specimens, by the chemical analysis of some of them, and by the microscopic examination of others, and by general descriptive lectures, of becoming practically acquainted with many of the principal mercantile commodities.

"It is impossible that a student, during his school course, or, indeed, during life, should obtain a complete knowledge of the various objects found in such a museum. But just as the geologist is satisfied to know the general characteristics of the minerals of which any rock is composed, and the organic remains which are found therein, without possessing the intimate knowledge of those matters which the chemist or biologist should possess, so the commercial student may be satisfied to know such of the properties of the substances he meets with as are essential to his being able to distinguish them as commercial products, without necessarily possessing that deeper and more detailed knowledge which the specialist would seek to obtain. It is very desirable that the commercial student should have access to a properly equipped museum, and that he should learn at school something of the properties of the materials he is likely to meet with in his mercantile career. Such museums are necessarily of slow growth."[1]

Collecting a commercial museum is a local problem, and when completed the museum should represent the commercial interests of the region. Certain schools have gathered considerable material by enlisting their students and, after equipping them with the proper credentials, sending them out to solicit specimens. It is to be hoped

[1] Magnus, *Industrial Education*, pp. 84–87.

that the extensive Commercial Museum in Philadelphia will plan its work so as ultimately to furnish schools with collections of products.

Commercial Schools and the Business Community. — To carry on their work with the largest measure of success, schools of commerce need to have the confidence and the support of the business community. The superintendent of schools at the greatest business center in the United States made an effort recently to determine how largely employers of labor turned to education as a means of fitting their employees. A series of inquiries was sent to selected business houses in New York, covering such points as: is any standard of educational equipment insisted upon; what is the relative value of American *vs.* foreign trained youths for commercial work; to what extent is the public school a preparation for mercantile life; and is any effort made to get those already engaged to continue their education by attendance upon night schools, or through other means? On the basis of the thirty-two replies received, which Superintendent Maxwell felt was insufficient data, the following conclusions were reached: (1) merchants and manufacturers have done little for improving education by insisting that those they employ shall have attained a certain educational standard; (2) they have done next to nothing for higher education by requiring that those who take places of trust and responsibility shall have had the training of the college or the secondary school; (3) they have not done their whole duty by encouraging those already in their

employ to continue their education by study before or after business hours.

While the information on which the above conclusions are based is slight, it is likely representative, and the conclusions reached would probably hold for business communities in general in this country. A great obstacle in the establishment of business schools of a proper character, is the inertness of the business community itself, and the disposition on the part of business men to take boys into their offices in the lowest positions and promote them with age and experience. Such a course is at once unfair to the boy, and is contrary to common practices in other lines of work. This inertness must be overcome; business men must be enlisted in the project to give a training that will equip workers, and then they should make it a rule to give preference to those who have complied with a higher standard of preparation. Such is already the practice of members of the London Chamber of Commerce, and of other foreign commercial organizations.

As dependence with us must be largely upon public institutions, it would seem the part of wisdom to interest in these, and to select for their boards of control, men who are active in trade and industry. Foreign experience here is of value. The merchant guilds in Germany and other European countries have not only encouraged schools of commerce as members of the community by formulating public sentiment, but they have contributed directly to the maintenance of the schools. Frequently the expense of conducting the schools, above the re-

turns from fees, is divided between public grants and the private bequests of merchants or merchant organizations. But most important, perhaps, of the influences of the merchant class upon schools of commerce have been their part in the formation of courses of study, and in determining the methods of teaching. And when the business community and the educational administration shall be brought closer together in formulating the policies of schools of commerce, the difficulties incident from lack of public interest on the one side, and from the too academic character of the instruction on the other, will be largely removed. One hopeful sign of the times, so far as business men are concerned, was the Guildhall conference held a few years ago in London.

From the academic side, we have the following recommendations from one American city for utilizing the business community in establishing and administering commercial education: —

I. "Commercial high schools should be regularly inspected by members of the Chamber of Commerce appointed for that purpose. The inspectors should periodically report upon the efficiency of the work.

II. "The course of study should be at least once a year submitted to a committee of mercantile experts appointed by the Chamber of Commerce, so that it may always be suited to the necessities of commerce.

III. "The Chamber of Commerce might appoint two or more of its members to assist in the examination for the licensing of teachers to teach in the Commercial High

School. Particularly is this necessary in case of those who are to teach technical mercantile branches."[1]

A serious obstacle to the successful establishment of commercial education is the seeming barrier between the academic and the practical. Business men, on the one hand, pride themselves on their ability to get on without education, thinking success a matter of smartness rather than of training; not infrequently do we find men contrasting their business success with their limited education, and boasting that education is not an essential for success. Over against this is the cordial spurning of the practical that too frequently characterizes educators. An instrument of education that has utility is felt by them to be contaminated. Schoolmen are too prone to feel that if subject of study has practical value, it is besmirched. From Aristotle down it has been common to hold employments exercised for gain as sordid and as tending to "render the soul unfit for the practice of virtue."[2] The problem of making our education practical, and that without too great sacrifice of the ends of training, is not easy of solution, yet it is this problem with which commercial education is confronted. The only hope of success is in having men of affairs and educators come to a better agree-

[1] Maxwell, *Commercial Education*, pp. 10–11.

[2] *Politics*, Bk. VIII, Chap. II. Sir Albert K. Rollit, speaking of academic practice in England, says that they have taught,

> "The languages — especially the dead;
> The sciences — especially the abstruse;
> The arts — at least all such as may be said
> To be the most remote from common use."

ment as to what education is, and how subjects having a practical value can be utilized in obtaining it. Many men in commercial life are entirely safe for educational counsel. It has been the writer's good fortune to confer on educational questions with a number of business men, to hear others of them speak, and to read addresses and papers of many others; on the whole, these men are conservative and surprisingly well balanced. Educational administrators could well defer to men of affairs more largely than they do. Not only are commercial men competent to pass on educational plans originated by others, but intelligent initiative is often shown by them in expressions such as: "If our commercial men are to be better educated, if their standing in the world is to be worth anything, they must add to their best possible practical training, special, careful, and scientific supplemental training;" this by a representative body of German merchants, but it can be matched by a more recent resolution of the New York Chamber of Commerce: "Whereas, The modern conditions of commerce and industry require wider knowledge and higher education on the part of business men; Whereas, The present educational facilities offered to business men are inadequate and fail to equip them for competition in the world's commerce; Resolved, That the Chamber of Commerce of the state of New York earnestly favors the establishment and development of sounder commercial education, both in secondary schools and higher institutions of learning." [1]

[1] The National Association of Manufacturers has passed the following resolution: —

Spirit of Commercial Schools. — Schools of commerce must by some means be given the flavor and spirit of business life. This, however, cannot come from converting the school into the counting-house. Such action would destroy the *school;* our prime end must be ever educational; but there is possible an education that comes from an up-to-date knowledge of business activity and business conditions. As President Eliot says, a school of commerce "should possess the means of keeping its knowledge of commercial conditions absolutely fresh. No salted provisions or canned goods would be useful in its larder. Its teachers would have to live at a commercial center, and breathe every day a wholesome commercial atmosphere. Boards of trade would be better supervisors for such a school than any bureau of education. Men actively engaged in foreign commerce ought to oversee it." [1]

"Recognizing that the future prosperity of the United States depends in a large measure on the ability of its manufacturers and merchants to intelligently conduct foreign trade and business of a complex character, and that to secure this end it is desirable to place within the reach of young men facilities for securing comprehensive business education, therefore be it

"Resolved, That the National Association of Manufacturers, at its fifth annual convention, assembled in the city of Boston on the twenty-sixth day of April, 1900, advocates the establishment of free public commercial and technical schools or commercial and technical departments in high schools, colleges, and educational institutions, with a comprehensive course of study, and requests its members to use their endeavors to secure the establishment of such schools or departments in the cities and States which they represent."

[1] Address before International Commercial Congress, Philadelphia, published in *Proceedings of Congress*, also in *Educational Review*, December, 1899. "You cannot teach commerce from a cell." — Sir Albert K. Rollit.

The means of keeping a business school in touch with actual business conditions are varied. As was noted above, business men should appear in it for occasional addresses, or for special courses of instruction. Regular instructors should, if possible, be men who have had business experience, and certainly men who have strong business leanings. The teachers in a commercial school should live in a world of real things and not of theories. Representative journals of trade and industry should be kept on file, and the newest books on the work in hand placed before the students; but by a system of clippings and filings the information may be kept in advance of the books. Students should be stimulated to gather and coördinate knowledge on special subjects of investigation, both for the knowledge itself and for the training that comes from doing work of this sort.

Supreme Need for Leaders and Teachers.—Success in any sort of teaching depends upon "the living personality of the teacher and in his speaking out of the fullness of his heart." "The really essential matter in education," says Professor Paulsen, "is the teacher's love for his work and sympathy with his pupils. This it is which awakens life and power in their minds. Schemes of study cannot do this; curriculum and method cannot do it; the most perfect method, the finest and most inspiring subject-matter, are dead things in themselves. Still less can state supervision or control accomplish it."[1] More im-

[1] Professor Paulsen, quoted, Sadler, *Problems in Prussian Secondary Education for Boys*, p. 3.

portant than money, commercial education needs men — men of commanding power as organizers and leaders — men who can create the proper sentiment in matters educational. Commercial education asks that those who serve it shall stand in a middle position between the business community and academic interests. It is the lack of large-minded, well-balanced, and aggressive leadership and of equipped and experienced teachers that offers the most serious obstacle to business education. We still must say of this country, as Mr. J. J. Findlay some years ago said of England, there is not a sufficient supply of competent teachers, and, we can say with equal truth, it is impossible to produce results without them. When the late Professor Wolfrum from the Commercial School at Leipzig was questioned as to how Germany got her teachers for commercial schools, he answered, "we have to create them ourselves, and it has taken fifty years to do it." It has well been felt that one of the most useful services that the higher schools of commerce in London, Paris, Antwerp, Leipzig, and Cologne can render, is to train men to carry the branch of instruction for which they stand to other schools. While English and continental teachers are availing themselves of the training of higher commercial schools in Europe, Americans are doing little or nothing to the same end. Business education should never become a part of our system of general instruction unless it be liberally planned. Our horizon must be broader than the mere technique or detail of business; we must avoid the routine of the busi-

ness college on the one hand, and the monotony of academic formalism on the other. Whence shall come the virtue to give old knowledge new utility and new attraction? One can safely hazard that it will not proceed out of ourselves. We may expect our higher commercial schools to give substantial assistance, but they in turn need stimulation and guidance. Our educational Moses must be one who has stood on other ground than his native heath; he must needs travel, particularly to observe and study other systems of education. Halting and apologetic policies of those directing experimental work, bodes ill for the future. Every teacher, but more especially one who is to have committed to his hand an educational experiment, should have confidence in and enthusiasm for his work. But more than this — these qualities should be born of knowledge. Commercial teachers should live up to the light which they have and see to it that their light be not darkness.

What would seem an ideal preparation for a teacher of commercial branches would be, first, a broad training in English literature, history, modern languages, science, and economics, to which there should be added familiarity with business operations, practical experience, travel, and observation. This standard may be too high; the professors in commercial schools in Europe are mainly men who have not had business experience, though they have strong business instincts. First of all, teachers in commercial schools should live in a commercial atmosphere, which in itself is a preparation for their technical work.

In attempting to solve the difficulties attendant upon lack of teachers, let us not make the mistake of feeling that the man who has had business experience is thereby qualified to teach even technical business subjects. It does not hold for manual training that a carpenter is fitted to give instruction in wood-carving, or that a blacksmith is a proper person to teach metal work. What are termed "teaching gifts" are fundamental as a preparation, and to these there should be added academic preparation first of all, and then, if possible, practical experience in business, but be it said again, the prime requisite is the "personality of the teacher. Without this no mechanical aids avail. Method is indeed necessary; well-thought-out curricula are an advantage; the testing and comparison of results an indispensable help. But all these things are dead in themselves. The thing that alone breathes life into them all is — the teacher, on fire with a love of his work, full of communicable purpose, and clear as to the laws of duty. The only living force in education is a moral force, informing with power not its own, the knowledge which else is dead." (Sadler.)

Already there are evidences of efforts to furnish special preparation for commercial teachers. First there is the training in the subject-matter of commercial studies by the higher schools of commerce. In many instances courses in these schools are made consciously to deal with the problems of presentation; in all cases methodology is involved. Certain of the departments of education in universities are beginning to give attention to both the

meaning and the practice of commercial education. Normal schools are not indifferent to present demands for commercial teachers. A department for the training of such teachers was installed in the California (Pa.) Normal School in 1903. A commercial department has been launched at Indiana (Pa.) Normal. The private normal school at Valparaiso, Indiana, is already making preparation for a similar department. It is probable that these are but instances of a large number of normal schools that either have started or contemplate starting normal commercial departments. A rather unique experiment along this line is being carried on at Drexel Institute, Philadelphia. The commercial course for teachers there inaugurated furnishes one year of special work to persons of good general education who have had two years of teaching experience. There has been shown to be a demand for this, and the director of the department reports results as gratifying.[1]

[1] The studies for this course with the hours devoted to them are as follows:

SUBJECTS	HOURS PER WEEK	
	1st Term	2d Term
Bookkeeping	3	3
Commercial Arithmetic	3	3
Commercial Geography	3	3
History of Commerce	2	0
Banking and Finance	1	1
English Language	2	2
Civics	2	2
Shorthand	3	3
Typewriting	3	1
Commercial Law	0	2
Mechanism of Commerce	0	2
Penmanship	1	1
	23	23

Equality of Recognition. — It would seem clear from European experience that schools of commerce will not have the largest measure of success unless they are given recognition with other forms of training of similar grade. The Superior School at Paris, established in 1820, was for more than sixty years an experiment of which the outcome was in doubt. In this period it was the strong leadership, with the personal sacrifice and devotion of the men who were directors, and the support of the Paris Chamber of Commerce that kept the school in operation. After many years of fostering of this and other schools, and with seeming slight success, M. Jacques Siegfried undertook an examination to determine the condition of schools of commerce in France, and the reasons therefor. He found that the total enrollment was less than one thousand pupils, and upon examination was led to the conclusion that the superior values attached to the diplomas of other schools was the chief cause of small attendance upon, and slight interest in, schools of commerce. M. Siegfried urged for a more complete separation of commercial and other forms of instruction, and for the equalizing of the privileges which were attached to training in different lines. By Act of 1889, the French extended to those who had the certificate of the higher schools of commerce exemption from two years of military service, as was done with the certificates of other higher schools; other privileges have been extended by various departments and bureaus of the French government, among them eligibility to compete for consular clerkships, for junior clerkships

in the Ministry of Commerce and Industry, and for positions in the customs department; students may also be admitted to competition for places in the commercial section of the Colonial School. The students of the Superior School are given advantages in the competitive examinations for clerkships in the central colonial offices, also for places in the customs. Extension of privileges at once affected favorably the condition of commercial schools in France. Similar conditions with very similar results have already been shown for Germany. These facts are significant as a guide in shaping American policies.

Conclusion and Summary. — All good friends of higher education should hail the advent of schools of commerce. Those who have opposed existing higher schools on grounds of their separation from the community, find in schools of commerce an answer, for these are people's colleges, an expansion and extension of the elementary schools, and a means of preparation for life. Future business men will in these schools get the training from which they will regard their life work as an end in itself, as well as a means to an end. Under instruction of schools of the type above considered, industry and trade will be raised to a higher level; the business man will be less of a machine; and industrial society regarded, as in truth it is, a social institution. Schools of commerce can give more of the spirit which finds pleasure in business directly and which seeks to be of service in daily life. The demands of the present are for a more efficient business man, a smaller percentage of business failures, a more intelligent devotion

to business as an occupation, — demands which can be met only by special educational provision. Competition, internal and external, forces the issue upon us; the trend of events is unmistakable; society is preëminently industrial and economic, and our education must reckon with the predominant institution. Education must fit for an economic citizenship.

In the main and for the immediate future, existing educational organization and equipment, and the existing teaching force, must be looked to for furnishing the needed commercial education. In the great centres of population and commercial activity, there will be special schools, but departments and schools within existing institutions must do the larger share of the work. This necessitates modification of organization, new interpretation of what is already in the curricula, as well as the adding of new elements, and specialization on the part of teachers. If the task be well defined and fairly undertaken, the genius and freedom from conventional restraint, so characteristic of American educational leaders, will be equal to it. Commercial education, soundly conceived, and wisely inaugurated, is not then to supplant, wholly or in part, educational agencies now in operation; rather its aim is to interest a new element in our communities in schools of secondary and higher grades.

The success of schools of commerce will depend very largely upon their ability to get and hold the favorable regard of business men; their largest measure of success will come from an establishment with facilities and an equipment

for their special needs; their work should be distinctive. On the other hand, commercial schools should have a stable academic basis and be recognized as fairly equal in educational value to other institutions of corresponding grades. Finally, the present crying need is not costly equipment, but men with a genuine enthusiasm born of knowledge and experience along the lines of their work. The obstacles are many, and they will be removed with difficulty; but greatest of these is lack of men. With men properly equipped and properly disposed, commercial education can demonstrate its academic worth and sustain itself as a means of training; it will show its practical value and win the favor of its proper constituency; it will gain its establishment and become what it should be, a permanent adjunct to our system of instruction.

APPENDIX I

STATISTICS OF INSTITUTIONS

HIGHER GRADE PUBLIC SCHOOLS OF COMMERCE

Schools retaining their Students till the Age of 18 *at least* (1900)

In Germany	18 (4 of University rank)
In Belgium	10 (3 of University rank)
In France	12 (4 of University rank)
In Italy	4 (1 of University rank)
In Sweden and Norway	3
In Austria-Hungary	10 (2 of University rank)
In Portugal	1
In Switzerland	7
In Japan	2 (both of University rank)
In the United States	191 (7 of University rank)

"None of these schools had less than 100 students, and many had 300 or more."

"The innumerable schools for boys under 16 years of age are not included."

"The number of institutions for higher commercial education has been increasing rapidly since 1900."

Memorandum of P. E. J. Hemelryk
To William Oulton, Esq.

INSTITUTIONS GIVING COMMERCIAL EDUCATION IN THE UNITED STATES IN 1902

	NUMBER
Colleges and Universities	177
Public and Private Normal Schools	51
Private High Schools and Academies	956
Public High Schools	3213
Commercial and Business Schools	520

Report of Commissioner of Education, 1902, *Chapter XII.*

Attendance of Schools in the United States

Scholastic Year	In Institutions not distinctly Business Schools					In Commercial and Business Schools	Aggregate of Students in Commercial Studies
	Universities and Colleges	Normal Schools	Private High Schools and Academies	Public High Schools	Total		
1893–1894 . .	7,300	7,771	4,466	15,220	34,757	115,748	150,505
1894–1895 . .	4,577	5,293	8,819	25,539	44,228	96,135	140,363
1895–1896 . .	5,678	5,375	9,889	30,330	51,272	80,662	131,934
1896–1897 . .	5,056	6,297	11,574	33,075	56,002	77,746	133,748
1897–1898 . .	5,869	5,721	9,740	31,633	52,963	70,950	123,913
1898–1899 . .	6,463	6,126	10,609	38,134	61,332	70,186	131,518
1899–1900 . .	7,953	6,657	15,649	68,890	99,149	91,549	190,698
1900–1901 . .	8,610	7,099	16,281	84,412	116,402	110,031	226,433
1901–1902 . .	9,207	1,065	16,384	76,794	103,450	137,247	240,697

CURRICULA FOR TECHNICAL COMMERCIAL SCHOOLS

METROPOLITAN BUSINESS COLLEGE,

Chicago, Ill.

COURSES OF STUDY[1]

I. THE COMMERCIAL COURSE, embracing —

Bookkeeping by Single and Double Entry.
Business Arithmetic.
Business Correspondence.
Commercial Law.
Plain Business Writing.
Business Methods and Forms.
Drills in Rapid Calculation.

II. THE SHORTHAND COURSE, embracing —

Shorthand Writing.
Typewriting.
Business Letter Writing.
Penmanship.
Spelling.
Practical Grammar.

[1] Students taking work in one of these departments are permitted to elect studies in the others.

III. THE ENGLISH TRAINING COURSE, embracing —
Arithmetic.
Penmanship and Letter Writing.
Reading.
Spelling.
Grammar and Composition.
Geography.
United States History.

The above are planned as one-year courses. The Metropolitan College (1903) offered an additional year under the head of Higher Commercial Education.

SECOND-YEAR COURSE

Commercial Geography.
Higher Accounting.
Political Economy.
Advertising.
Civil Government.
Parliamentary Law.
Commerce and Finance.
Modern Languages.

DREXEL INSTITUTE

COURSE IN COMMERCE AND FINANCE

FIRST YEAR

SUBJECTS	HOURS PER WEEK
English Language	2
Commercial and Industrial Arithmetic	4
Business Customs	1
Bookkeeping	5
Penmanship	2
Typewriting	2
Correspondence	1
Commercial Geography	2
Spanish Language	2
Public Speaking	1
Physical Training	2
Total	24

SECOND YEAR

SUBJECTS	HOURS PER WEEK	
	1st Term	2d Term
English Language	2	2
Bookkeeping	3	3
Banking and Finance	1	1
Commercial Arithmetic	3	3
Commercial Geography	2	2
History of Commerce	2	—
Mechanism of Commerce	—	2
Civics	2	2
Spanish Language	2	2
Commercial Law	—	2
Business Printing and Advertising	—	1[1]
Typewriting	2	—
Public Speaking	1	1
Physical Training	2	2
Total	22	23

CURRICULUM OF THE NATIONAL SCHOOL OF COMMERCE OF THE CAPITAL, BUENOS AYRES

FIRST YEAR[2]

General review of Arithmetic with some notions of Algebra	4
Spanish and Commercial Correspondence	5
Commercial Geography: principal countries of America, with particular reference to Argentina and the history of Argentine Commerce	3
Bookkeeping and Office Practice	6
Penmanship	2
English	5
French	5
Total	30

SECOND YEAR

Bookkeeping and Office Practice	6
Spanish and Commercial Correspondence	3

[1] Part of the term.

[2] To enter upon this course a student must have completed his fourteenth year, and have been grounded for two years in each of the following subjects: Geography, History, Arithmetic, Spanish, English, and French.

Commercial Geography and History of Commerce	3
Commercial Products	3
Notions of Political Economy, first semester Notions of Commercial Law, second semester	2
Shorthand and Typewriting	3
English	5
French	5
Total	30

THIRD YEAR

Bookkeeping and Office Practice	7
Spanish and Commercial Correspondence	3
Practical Instruction in Custom House Procedure	4
Shorthand and Typewriting	3
Commercial Products	3
English	5
French	5
Total	30

A pupil who satisfactorily completes the three years of this course is promised the title of "Mercantile Expert." Diplomas are issued by the school and countersigned by the assistant secretary of the Minister of Justice and Public Instruction. In administration the school is subject to the Minister of Public Instruction.

SUGGESTED TECHNICAL COURSE FOR SCHOOL OF COMMERCE[1]

This suggested course is for young people from 15 to 18 or 19 years of age who are intending to go into business houses as responsible employees, travelers, buyers, agents, managers, etc.

The course is to extend over three years. Each lesson period is intended to be of 50 minutes' duration, and the lesson periods for the week, it will be seen, give a total of 36 : —

[1] Hooper and Graham, *Commercial Education*, pp. 221–222. See also pp. 28–73 of the same for discussion of this scheme.

COURSES	OUTLINE OF COURSE	AVERAGE OF RECITATION
I. The "Modern Languages" Course.	(*a*) For European and American Markets. (*b*) For Eastern Markets (optional).	12 lesson-periods weekly.
II. The "Commercial Practice" Course.	(*a*) Methods of exporting and importing Goods, including Freightage and Modes of Transport. (*b*) Foreign Tariffs, Weights, Measures, and Moneys, and Exchanges. (*c*) Markets at Home and Abroad, and Trade Customs. (*d*) The Technicalities of Commercial Documents. (*e*) Arithmetic and Algebra applied to Commerce. (*f*) Accountancy, Home and Foreign Accounts. (*g*) Commercial Correspondence in English, French, and German. (*h*) Organization of Commerce.	12 lesson-periods weekly.
III. The "Study of Materials" Course.	(*a*) Commercial, Industrial, and Statistical Geography. (*b*) Commercial and Industrial History. (*c*) Knowledge of Products and Industries. — "Warenkunde."	6 lesson-periods weekly.
IV. The "Principles of Commerce" Course.	(*a*) Economics and Statistics. (*b*) Banking and Currency.	4 lesson-periods weekly.
V. The "Commercial Law" Course.	(*a*) Home. (*b*) International.	2 lesson-periods weekly.

Commercial work in the West Riding of Yorkshire is adapted from the plan above laid down (see pages 151 to 154). The latest official documents from the West Riding authorities (1904) show a slight change in terminology and classification, but in the main the earlier subjects are continued.

CURRICULA FOR SECONDARY SCHOOLS OF COMMERCE

SUGGESTED CURRICULUM FOR HIGH SCHOOLS OF COMMERCE IN THE UNITED STATES

By Committee of Nine, Department of Business Education, National Educational Association[1]

FIRST YEAR

FIRST HALF	Recitations per Week	SECOND HALF	Recitations per Week
English	4	English	4
German, or French, or Spanish	5	Same Language Continued	5
Algebra	5	Algebra	5
Bookkeeping	3	General History to 800 A.D.	4
Drawing	3	Bookkeeping	3
Penmanship	3	Penmanship	2
Total	23	Total	23

SECOND YEAR

FIRST HALF		SECOND HALF	
History of English Literature; Composition	3	History of English Literature; Commercial Correspondence	3
Modern Language Continued	5	Modern Language Continued	5
Commercial Arithmetic	5	English and European History	5
Study of Commercial Products, or Local History and Industries	5	Commercial Geography	5
Bookkeeping	5	Typewriting	5
Total	23	Total	23

THIRD YEAR

FIRST HALF		SECOND HALF	
Rhetoric and Composition	3	Plane Geometry	5
United States History	5	Physics or Chemistry Continued	5
Physics or Chemistry	5	Commercial Law	4
Bookkeeping and Office Practice	5	Political Economy	4
First Language Continued, or Second Modern Language, or Shorthand and Typewriting	5	Election of First Half Continued	5
Total	23	Total	23

[1] Presented at Boston (1903). The suggestions as to the number of recitation periods were based on the supposition that the length of a period is 45 minutes. It was suggested that wherever possible periods be added for physical culture.

FOURTH YEAR

FIRST HALF	Recitations per Week
English Literature, Themes, and Parliamentary Practice	5
History of Commerce	5
Fifteen periods to be selected from—	
Language Elected Continued, or Shorthand and Typewriting Continued	5
Physics or Chemistry (as in third year)	5
Banking and Finance	5
Solid Geometry	5
Mechanical Drawing	5
Advertising, Study of Trade Journals, and Commercial English	5
Total	

SECOND HALF	Recitations per Week
English Continued	5
Civil Government	5
Fifteen periods to be selected from—	
Same Election Continued	5
Physics or Chemistry Continued	5
Accounting, Organization, and Auditing	5
Applied Arithmetic	5
Office Practice for Stenographers	5
Total	

COMMITTEE OF NINE'S CURRICULUM

Arranged by Subjects

LANGUAGE STUDIES

English. 4 periods weekly, through the first year.[1]

History of English Literature, with Composition and Commercial Correspondence. 3 periods, through the second year.

Rhetoric and Composition. 3 periods, first half of third year.

English Literature, Themes, and Parliamentary Practice. 5 periods, through the fourth year.

Shorthand Writing (Elective). 5 periods, through the third and fourth years.

German, French, or Spanish. One to be continued 5 periods weekly for the first two years.

German, French, or Spanish (Elective). Language studied the first two years continued, or second language may be taken. 5 periods, through the third and fourth years.

HISTORY AND SOCIAL SCIENCE

General History to 800 A. D. 4 periods, weekly, second half of first year.

English and General European History. 5 periods, second half of the second year.

[1] Unless otherwise stated, subjects are meant to be required.

United States History. 5 periods, first half of the third year.

History of Commerce. 5 periods, first half of the fourth year.

Study of Local History and Industries (Elective). 5 periods, first half of the second year.

Political Economy. 4 periods, second half of the third year.

Banking and Finance (Elective). 5 periods, first half of the fourth year.

Civil Government. 5 periods, last half of the fourth year.

MATHEMATICAL STUDIES

Algebra. 5 periods, through first year.

Commercial Arithmetic. 5 periods, first half of second year.

Plane Geometry. 5 periods, second half of third year.

Solid Geometry (Elective). 5 periods, first half of fourth year.

Applied Arithmetic (Elective). 5 periods, second half of fourth year.

SCIENCE AND GEOGRAPHY STUDIES

Study of Commercial Products (Elective). 5 periods, first half of second year.

Commercial Geography. 5 periods, second half of second year.

Physics or Chemistry (Elective). 5 periods, through third year.

Physics or Chemistry (same Elective). 5 periods, through fourth year.

TECHNICAL BUSINESS STUDIES

Drawing. 3 periods, first half of first year.

Mechanical Drawing (Elective). 5 periods, first half of fourth year.

Penmanship. First year, first half, 3 periods; second half, 2 periods.

Elementary Bookkeeping. 3 periods, through first year.

Bookkeeping. 5 periods, first half of second year.

Bookkeeping and Office Practice. 5 periods, first half of third year.

Accounting, Organization, and Auditing (Elective). 5 periods, second half of fourth year.

Typewriting. 5 periods, second half of second year.

Commercial Law. 4 periods, last half of third year.

Advertising, Study of Trade Journals, and Advanced Commercial English (Elective). 5 periods, first half of fourth year.

Office Practice for Stenographers (Elective). 5 periods, second half of fourth year.

NEW YORK HIGH SCHOOL OF COMMERCE

CURRICULUM[1]

FIRST YEAR

Required.	PERIODS.
English	4
German, French, or Spanish	4
Algebra	4
*Biology (with especial reference to Materials of Commerce)	4
Greek and Roman History	2
**Business Writing	4
***Stenography	2
Drawing	2
*Physical Training	2
Music	1

Electives.	PERIODS.
Business Arithmetic	1
Commercial Geography	1

SECOND YEAR

Required.	PERIODS.
English	3
German, French, or Spanish	4
Plane Geometry	3
Chemistry (with especial reference to Materials of Commerce)	4

*Including Physiology.

**First half year.

***Second half year.

[1] *Year-book*, 1903, p. 31.

Mediæval and Modern History (with especial reference to Economic History and Geography)	3
Stenography	2
Drawing	2
Physical Training	2

Electives.

	PERIODS.
German, French, or Spanish	4
Business Forms and Bookkeeping	3
Music	1

THIRD YEAR

Required.

	PERIODS.
English	3
German, French, or Spanish	4
Algebra and Geometry	3
Physics	5
English History (with especial reference to Economic History and Geography)	3
Physical Training	2

Electives.

	PERIODS.
German, French, or Spanish	4
Bookkeeping and Commercial Arithmetic	4
Stenography and Typewriting	3
Drawing	2

FOURTH YEAR

Required.

	PERIODS.
English	3
German, French, or Spanish	4
Economics and Economic Geography	4
History of the United States (with especial reference to Industrial and Constitutional Aspects)	4
Physical Training	2

Electives.

	PERIODS.
German, French, or Spanish	4
A Third Language	4
Advanced Chemistry	4

Electives.	PERIODS
Trigonometry and Solid Geometry	4
Elementary Law and Commercial Law	4
Business Correspondence and Office Practice	4
Stenography and Typewriting	4
Drawing	2

FIFTH YEAR

Required.	PERIODS
English	3
Logic, Inductive and Deductive	3
Physical Training	2

Electives.	PERIODS
A foreign language	4
Advanced Mathematics	4
Advanced Physics	4
Industrial Chemistry	4
Economic Geography	4
(Nineteenth-century History, Europe and Orient; Diplomatic History, United States and Modern Europe)	4
Banking and Finance, Transportation and Communication	4
Administrative Law and International Law	4
Accounting and Auditing	4
Business Organization and Management	4
Drawing	4
Advanced Economics	3

THE JACOB TOME INSTITUTE

COMMERCIAL STUDIES

SECOND HIGH SCHOOL YEAR[1]

Penmanship. Movement, rapidity, legibility, business forms, examination papers, etc.

Bookkeeping, Introductory and Advanced. Principles, the various books, single and double entry, uses in private life and in various lines of business, etc.

[1] Differentiation begins at this place. Three years of general work precede. Other studies are taken in connection with those mentioned.

Subjects of Study	First Year	Second Year	Third Year	Fourth Year
I. English Language and Literature	Latin in English 3 History of American literature; composition writing 3	History of English literature; composition and letter writing 3	Eighteenth century literature; essay writing; practice in oral discourse 3	Nineteenth century literature; Shakesperean drama; thesis writing 3
II. Modern Languages		German—Grammar, reading and exercises 5	German—Reading, composition and conversation 3 French or Spanish—Grammar, exercises and reading 4	German—Advanced reading, conversation and correspondence 3 French or Spanish—Reading, conversation and correspondence 3
III. Mathematics	Elementary algebra 5	Advanced commercial arithmetic 2 Plane geometry 3		Review course and advance work in mathematics (elective) 3
IV. Science	Commercial products; raw materials of commerce 4	Commercial geography 3	Physical science; physics and chemistry 4	Industrial chemistry 2
V. History	Greek and Roman history; European history to 800 A.D. 3	English and modern European history 2	History of the United States 2	History of commerce 3
VI. Economics and Civics	Introductory economics; Philadelphia history and industries [lectures and quizzes] 2	Special lectures in connection with commercial geography	Political economy 2	Transportation, banking, and finance 3 Study of government 3
VII. Business Technique	Penmanship practice; writing of business paper; bookkeeping begun 2 Drawing 2	Bookkeeping 3 Shorthand and typewriting 4	Office practice 3 Shorthand and typewriting 4	Ethics of business and commercial law 2 Shorthand (elective) 3

Note. — Arabic numerals indicate recitation periods (approximately fifty minutes in length) per week for one year; in many of the subjects twice the indicated number are given for half a year.

THIRD HIGH SCHOOL YEAR

Phonography and Typewriting. Technique, application in school and business life.

Accounting and Office Practice. Records and analysis, business organization and control, partnerships, corporations, credits, manufacturing, investments, etc.

FOURTH HIGH SCHOOL YEAR

Corporation and Bank Accounting. Railways, building and loan associations, consolidations and trusts, bonds, stocks, banks and banking, clearing houses, etc.

Auditing and Business Methods. Duties of the auditor, accountant, manager, adjustment of books, examination of records of firms, corporations, and municipalities, etc.

Commercial Law. Elementary law, the law merchant, contracts, negotiable paper, agency, bailments, bankruptcy, insurance, corporations, property, etc.

Theory of Banking, Transportation, Finance, and Foreign Trade. Origin and development, foreign and domestic commercial credit, bank statements, the stock exchange, transportation, customs duties, exchange systems, etc.

Commercial Thesis. An original production based upon reading and personal observations of business operations in the line of the student's future vocation.

CURRICULA FOR HIGHER SCHOOLS OF COMMERCE

UNIVERSITY OF WISCONSIN

SCHOOL OF COMMERCE

ARRANGEMENT OF STUDIES

FRESHMAN YEAR

Subjects.	HOURS PER WEEK
Physical Geography and Physiography of the United States	3
German, French, or Spanish	4
English	3
Mathematics (Algebra and Commercial Calculation)	3
History (English or Modern European, Political and Economic)	3
Drill and Gymnastics	2
	18

SOPHOMORE YEAR

	HOURS PER WEEK
Commercial Geography	3
Foreign Language Continued	2
Mathematics (Commercial Calculation)	2
Chemistry or Physics	5
English (first semester)	2
Elementary Economics (second semester)	3
Accounting and Auditing	2
Drill and Gymnastics	2
	21

JUNIOR YEAR

Money and Banking and Transportation	3
Foreign Language Continued	2
American History	2
Business Practice	2
Elective Group	3
Free Electives	6
	18

SENIOR YEAR

Commercial Law	3
Foreign Language Continued	2
Business Practice	2
Elective Group and Thesis	4
Free Electives	7
	18

UNIVERSITY OF MICHIGAN

CURRICULUM OF HIGHER COMMERCE STUDIES[1]

FIRST YEAR

(Third Year in the University)

FIRST SEMESTER

Subjects.	HOURS
Problems of Political Economy	4
Social and Industrial Reforms	4
Commercial Geography of the Extractive Industries	3
Theory and History of Money	2
General Elections	7
	16

[1] University Announcement, *Courses* in Higher Commercial Education.

SECOND SEMESTER

	HOURS
Science of Finance	3
Commercial Geography of the Manufacturing Industries	3
Theory and History of Banking	2
Mathematics of Insurance and Statistics	2
General Elections	6
	16

SECOND YEAR

(Fourth Year in the University)

FIRST SEMESTER

Social and Industrial Reforms. (Alternates with Problems of Political Economy)	4
Resources and Extractive Industries of the United States	3
Commercial Law	3
Science of Accounts, Part I	2
General Elections	4
	16

SECOND SEMESTER

Transportation Problems	2
The Manufactures of the United States	3
Commercial Law	3
Science of Accounts, Part II	2
General Elections	6
	16

THIRD YEAR

(Fifth Year in the University)

FIRST SEMESTER

The Distributive and Regulative Industries of the United States	2
Technique of Foreign Trade. (Alternates with the Distributive and Regulative Industries of the United States)	2
The Money Market	2
Labor Laws of the United States and Europe	2
History of Industrial Chemistry	2
Theory of Annuities and Insurance	2
Thesis Seminary	2
	14

SECOND SEMESTER

	HOURS
Administration of Corporate and Public Industries	2
European Commercial Geography	2
American Trade with China, Japan, and the Philippines. (Alternates with European Commercial Geography)	2
History of the Industrial Physics	2
Business Organization	2
Thesis Seminary	2
	12

CURRICULUM OF AMOS TUCK SCHOOL, DARTMOUTH COLLEGE

FIRST YEAR

(Fourth Year in the College)

ECONOMICS

Advanced Economic Theory. A survey of the history of economic theory.

Labor. The present status of labor in the chief industrial nations.

Money, Credit, and Banking. The natural history of money, the history of monetary legislation and banking, especially in the United States, and a detailed discussion of banking operations.

History and Theory of Transportation. Development of rail and water transportation, especially in the United States, theories of rates, consideration, legislation, and the problem of control.

Public Finance. Governmental expenditures and revenues, especially in the United States, taxation, debt, and financial administration.

Commercial Geography. The extractive industries, especially from the technical standpoint, involving a comparison of the conditions of development in all the important countries.

The manufacturing industries, conducted in the same manner.

Studies in Statistics. Statistical investigation of various phases of economic development.

HISTORY

Europe. The political history of from the French Revolution to the Treaty of Berlin (1789–1878).

United States. The political history of from the close of the Revolutionary War to the close of the Reconstruction period (1783–1877).

POLITICAL SCIENCE

International Law. Historical and explanatory of present international relations.

Comparative Politics. Critical comparison of present constitutions, and study of the actual working of the governments of England, France, Germany, and the United States.

SOCIOLOGY

Social Statistics. Classification of population as the result of physical or social causes, the results of vital statistics, investigation of crime, pauperism, and social reform.

Anthropological Geography. Man in his relation to his physical environment, followed by an investigation into the forms of economic life.

MODERN LANGUAGE

English. Commercial correspondence.
French. Advanced composition and conversation.
German. Advanced composition and conversation.
Spanish. Composition and conversation.

SECOND YEAR

(Post Graduate)

ACCOUNTING AND AUDITING

Theory and Practice of Accounts and Auditing. Opening, conducting, and closing accounts of manufacturers and dealers in investment securities, balance sheet, cost, depreciation, goodwill,

profit and loss; examination of accounts with reference to credit, insolvency, basis of capitalization, and change from partnership to corporation; comparison of systems and accounting; auditing.

Cost Systems. Study of systems of cost determination.

CORPORATION FINANCE AND SECURITIES

Corporation Finance. Forms of investment securities, and methods of corporation financiering, with analysis of corporation reports.

Money Markets and Speculation. Detailed study of the money market in its various phases. Stock and produce exchanges in this and foreign countries.

Investment. General principles, various forms, and legal phases. Analysis of investments of typical institutions.

Stock Exchange Methods. From the practical broker's standpoint.

ADMINISTRATION

Corporations and Corporate Administrations. Powers and duties of corporations and their officers. Details of their organization. Problem of control.

LAW

Commercial Law. Real and personal property, contracts, negotiable instruments, agency, carriers, insurance, and trustees.

International Commercial Law. The status of persons engaging in business in jurisdictions other than our own, with a study of foreign commercial codes.

Bankruptcy. The law of bankruptcy, with reference to the needs of business men.

STATISTICS AND MATHEMATICS

Commercial Statistics. Statistical studies of business methods and experience.

Commercial Mathematics. A presentation of the mathematical

principles and details needed by the administrator or financier, including brokerage, interest, insurance and bond tables, and the like.

POLITICS AND DIPLOMACY

Politics and Administration. A study of American political parties since 1873.

Diplomacy. The business of international negotiation, with studies of typical cases, including the organization of American and foreign diplomatic and consular services.

HISTORY

Modern History. History, character, and present circumstances of Canada, Mexico, Australia, and the principal countries of South America, Asia, and Africa.

MODERN LANGUAGE

Composition and Conversation. Advanced work in French, German, and Spanish, with special reference to commercial needs.

BUSINESS ORGANIZATION AND TECHNIQUE

Industries of the United States: Extractive. History, resources, technique, and markets of the principal extractive industries.

Industries of the United States: Manufacturing. Technical study of the typical manufacturing industries.

Business Methods. Organization and management of large industrial plants, including questions of labor, costs, markets, and competition.

Relation of the Employer to Labor. Organization and methods of trade-unions, and a study of the fundamental economic relations of employers and wage-earners.

COMMERCE

Commerce of the United States. Analysis of existing commerce, with a study of international routes, tariff laws, and commercial treaties.

International Trade Relations. The actual methods employed in trade with foreign countries, in which the products are followed from their sources to the consumers. The countries considered are: South America, Africa, Australasia, China and Japan, England, and Continental Europe.

Materials of Commerce. The more important aspects of the scientific problems which play a part in industrial affairs. The subjects considered are: economic chemistry, economic botany, economic mineralogy, and materials for construction and motors.

BANKING

Practical Banking. Organization, operation, and law of national, state, private, and savings banks.

TRANSPORTATION

Railroad Service. Organization, operation, and practical problems of the railroad business.

Railroad Operation. From the accountant's standpoint, including maintenance, revenue, and disbursements.

Water Transportation. The practical aspects of lake, river, and canal traffic.

INSURANCE

Theory and Practice of Life Insurance. A study of all its important forms, with special reference to the United States.

NEW YORK UNIVERSITY SCHOOL OF COMMERCE, ACCOUNTS AND FINANCE

CURRICULUM OF STUDIES[1]

ACCOUNTING.

1. Accounting Practice.
2. Advanced Accounting Practice.
3. Accounting Procedure.

[1] *University Bulletin*, June 15, 1903, pp. 15–30.

4. Theory and Practice of Accounts.
5. Philosophy of Accounts.
6. Auditing.
7. Accounting Principles.
8. Accounting of Executors and Trustees.
9. Investment Accounts.
10. Special Accounts.

COMMERCE AND INDUSTRY.

1. Political Economy.
2. Practical Economic Problems.
3. Business Organization and Practice.
4. Commercial Geography.
5. History of Commerce.
6. The Commerce of the United States.
7. Domestic Commerce and Transportation.
8. Raw Materials of Industry.
9. Industrial Values.
10. Industrial and Commercial History of the United States.

FINANCE.

1. Practical Finance.
2. Practical Banking.
3. Money and Credit.
4. Theory and History of Banking.
5. Foreign Exchange.
6. The Money Market.
7. Investments.
8. Speculation.
9. Panics and Depressions.
10. Corporation and Trust Finance.
11. Financial History of the United States.

LAW:

1. Contracts.
2. Agency and Elementary Law.
3. Sales and Mortgages.
4. Partnership and Corporation.

5. Bills and Notes, Assignees and Receivers.
6. Wills, Administration and Bankruptcy.
7. Insurance Law and Practice.

HIGHER COMMERCIAL SCHOOL, COLOGNE

GENERAL PLAN OF STUDIES

I. POLITICAL ECONOMY.

General Introduction.
Trade and Colonial Policies.
Sociology, especially the Condition of Laborers.
Technique and Organization of World-trade, including Money, Bank, and Exchange Customs.
Insurance.
History of Commerce.
History of Political Economy and Political Theories.
Finance, including a Survey of Conditions in the Principal Foreign Countries.
Factory and Agricultural Policies.
Statistics.

II. LAW.

Principles of Civil Law.
Trade, Exchange, and Maritime Law.
Insurance Laws.
Laws of Bankruptcy, Domestic and Foreign.
Foundations of States and Governments.
Colonial Law.
Patent, Trade-mark, and Copyright Law, Domestic and Foreign.
Factory Law.
Social Legislation.

III. GEOGRAPHY, MATERIALS OF COMMERCE, NATURAL HISTORY, AND TECHNOLOGIES.

General Geography.
Economic Geography.

Materials of Commerce.
Colonial Policy.
Physics, with Special Attention to Electricity.
Chemistry.
Mechanical Technology.
Chemical Technology.
Textile Industries.
Mechanics.
Industrial Hygiene.

IV. TRADE TECHNOLOGY.
Bookkeeping.
Commercial Arithmetic.
Correspondence and Accounting.

V. LANGUAGES.
English.
French.
Spanish.
Italian.
Russian.
Danish-Norwegian.
German for Foreigners.

VI. CULTURE SUBJECTS.
German and Foreign History.
History of Art.
History of Literature.
Philosophy.

SUPERIOR COMMERCIAL INSTITUTE AT ANTWERP

THIRD YEAR [1]

Accounts and Banks. Companies; industrial enterprises; banks; public funds; financial aspect of the principal countries; different systems of bookkeeping.

[1] The usual curriculum in the higher commercial schools of Europe is for two years. A preparatory year is common, but an additional year, as in the Antwerp school, unusual.

Constitutional Law. History of the constitutions of the principal countries; principles of the Belgian Constitution; the liberties recognized by the same; legislative, judicial, and executive powers; chief points of the English, French, and German constitutional régimes.

Administrative Law. Organization and competence of administrative authorities; execution of the law; deliberative authorities; administration of justice; armed force; public property, land and sea; industry, mines, commerce, and laws affecting the same.

Commercial and Maritime Legislation Compared. Merchants' and commercial acts; transactions under the principal legislative enactments; bills of exchange, inland and foreign; joint stock companies; bankruptcies and failures; tribunals of commerce; maritime law.

Rights of the People. Principles; history of the various states, of territory, of the customs of the sea, of rivers, and of straits; absolute right, relative right of the states; obligations of the states during time of peace; diplomatic agents, merchants, treaties; history and examination of the principal treaties relative to intellectual rights (patents, trade-marks, literary and artistic property, etc.); material interest (money, fisheries, commerce, and industry, means of communication, railways, postage, telegraphy, telephone).

Consular Service. Insight into the legislations of the principal commercial countries; historical classification and hierarchy; nominations, incompatibilities, attributes in Christian and non-Christian countries; commercial attributes, judicial, notarial functions, civil offices, divers powers.

Rights and Prerogatives of Consuls. Consular regulations; differences between states; pacific solutions, violent solutions; war; consequences of the declaration of war in the case of belligerents and neutrals; of the trade of the neutrals during war; acts; theatre and operation of the war; conventional relations of the belligerents.

Political Economy. Review of the lectures of the first and second years, and completion of the course; thorough study of special questions, economic and financial.

Industrial and Commercial Geography. Completion of the course of the first year; industrial geography of Belgium, in all its details; economic geography of different countries.

Industrial Statistics. Of statistics, their aim, use, characters, divisions, etc.; special study of the statistics of importation, of exportation, of transit, etc.; movements of the ports; warehouse statistics and returns; river fishing; special Belgian statistics, and statistics of the principal countries.

Industrial Technology. Study of the principal Belgian industries; raw materials and their production; manufactured products, qualities, classification, etc.

Description of manufactured products: —

1. Extractive industries, mining industries, quarries, manufacture of coke, gas; manufacture of lime and cement.

2. Metallurgical industries; smelting of iron and steel.

3. Ceramic industries; bricks, tiles, pipes for drainage; ceramic and cement pavements; china and earthenware.

4. Glass-making; crystal, plate glass, window glass, looking-glasses, mirrors, etc.

5. Chemical industries; manufacture of sulphuric and hydrochloric acids, nitrate of soda, potash, chlorals, white lead, etc.; paper-making.

6. Textile industries; spinning of cotton, wool, flax, hemp, jute, etc.; manufacture (weaving and preparation) of cotton tissues, wools, linens, etc.; manufacture of cables, ropes, cordage, etc.

7. Industries of construction, foundries, coppersmiths; construction of bridges and iron work; construction of steam engines and steam machinery, locomotives, and plant and rolling stock for railways.

8. Alimentary industries; corn trade; manufacture of sugar, beer, alcohol.

9. Divers industries; tannery and leather-band making, leather dressing, (clothing industry), hat-making, cloth-weaving, boot-making, ready-made clothes, corsets, etc.

Transportation (continuation of the course in shipbuilding and armaments of the second year). Railways: rails, stations; rolling

stock, locomotives, tenders, carriages, goods, vans, and trucks; tariffs of the transportation of passengers and goods; exploitation of railways by the state, by private companies; steam tram-lines; tramways.

Interior Navigation. Rivers, canals, material; canal boats, tugs, sailing boats, barges, etc.; tariffs.

Languages. German, Flemish, English, Spanish, Italian, and Portuguese; commercial, industrial, financial, and economic, reports; drafting deeds and documents, civil and commercial; conversation; study of the principal authors, publishers, contemporary political economists.

Russian (lower section for second-year students). Pronunciation, reading, grammar, dictation, exercise, and composition; epistolary and commercial style, exercises, etc.

Russian (higher section in the third year). Style in general; commercial letters; forms in use; translation of leading authors.[1]

ILLUSTRATIVE EXAMINATION QUESTIONS

LONDON CHAMBER OF COMMERCE

EXAMINATIONS FOR SENIOR COMMERCIAL CERTIFICATES, 1902

COMMERCIAL HISTORY

1. Give some account of the chief branches of import and export trade in this country in the fifteenth century.

2. State the measures taken by Henry VII for the furtherance of commerce. How far were they successful?

3. Give the history of the Levant Company, as leading up to the celebrated Bates case. What was this, and how did it end?

4. Give some account of the formation of the East India Company, and of the controversies to which its constitution and trade gave rise in the seventeenth century.

5. Give the history and tenor of the Navigation Act. When and why was it repealed?

[1] Translation of Professor Layton. Cited from Sadler, *Higher Commercial Education*, etc., pp. 51–52.

6. Write a brief history of the Corn Laws, with special reference to the measures of 1689, 1773, and 1815.

7. Write a short history of the South Sea Company.

8. Examine the commercial relations between England and the North American colonies during the hundred years before the Declaration of Independence.

9. Explain the historical importance of the term "balance of trade."

10. What were the effects on English trade of the Revolutionary and Napoleonic wars?

11. State the chief arguments in favor of protection, and examine their validity with reference to (*a*) the United Kingdom; (*b*) the United States.

12. Give the recent history of "bounties," and discuss the advantages and disadvantages with reference to (*a*) the producer; (*b*) the consumer.

ELEMENTS OF POLITICAL ECONOMY

1. Illustrate the value, to an economic student, of a knowledge of history.

2. Define capital, value, market price, natural price.

3. Investigate the grounds and limits of governmental interference with trade and industry.

4. What has cost of production to do with international trade?

5. "In the same open market, at any moment, there cannot be two prices for the same kind of article." Explain and comment on this.

6. Point out the advantages and disadvantages which have resulted from the localization of industries.

7. Discuss the relation between the standard of comfort and the rate of wages.

8. State the case for and against the restrictions imposed upon labor by trade-union policy.

9. Discuss the advantages and disadvantages of "industrial coöperation."

10. Examine the arguments for and against the "eight-hour" movement; and especially in its application to coal pits.

11. What are the causes which lead to a commercial crisis? What is its nature? What its results?

12. "A bank-note may be considered as a piece of money on which the seigniorage is enormous, amounting to all its value." Comment on this proposition, and state the circumstances which determine the value of paper money.

MACHINERY OF BUSINESS

1. Define in your own words a negotiable instrument, and compare a bill of lading and bill of exchange as to their respective negotiability.

2. When must a bill of exchange be presented for acceptance?

3. How should a check be indorsed in blank, specially and restrictively?

4. If the bank rate in Paris be 5 per cent, and the sight rate in London on Paris 25.28¾, what would be paid in London for a three-months bill on Paris?

5. Draft a cesser and lien clause for a charter-party, and explain its object.

6. Describe the use of bottomry bonds. If a second bottomry bond be given during the same voyage, which has priority as to payment?

7. The master of a vessel lets go his anchor close in shore, but is compelled through stress of weather to cut his cable, and the vessel strikes an adjacent sand bank. He is helped off by boatmen after throwing overboard some of his cargo and damaging more, and the ship taken into a port of safety. Sketch briefly the expenses that would appear in the average adjustment, and state how they are usually provided for.

8. What provision is made by the rules of the stock exchange as to special settlements in the shares of new companies?

9. Can a stockbroker close his client's account before settling day when he knows his client is insolvent?

10. What gave rise to the national debt in England? Explain the difference between the funded debt and the floating debt of the country.

BANKING AND CURRENCY

1. Explain the difference between money of account and standard money.

2. "Bad money drives out good." State the effect of this law, and mention cases in illustration.

3. Trace the history of the use of the guinea in English currency from its introduction till superseded.

4. Sketch briefly the causes that led to the demonetization of silver by Germany in 1871, and by the United States in 1873.

5. What do we pay with, gold or credit?

6. Discuss the utility of deposits, loans, and (in the case of banks of Issue) of notes in the banking business.

7. How is the issue of bank notes regulated in England?

8. What was the constitution of the Bank of England as contained in its first charter?

9. Give the facts in connection with the first occasion of the Bank of England being authorized not to pay its notes in gold.

10. Explain the interdependence of bankers' deposit rate, the Bank rate, and the discount rate in the open market.

EXAMINATIONS FOR JUNIOR COMMERCIAL CERTIFICATES, 1901

COMMERCIAL ARITHMETIC AND BOOKKEEPING

Commercial Arithmetic

1. Explain the terms: "Limited Liability;" "Joint Stock Company;" "Preference Stock;" "Brokerage;" "Annuity."

What amount of money must be invested in Indian 3 per cent Stock at 100¼ to yield the same income as that afforded by the possession of 10,000 Liverpool three-and-a-half per cents at 117?

2. Find by duodecimals:—

(i) The area of a board 20 ft. 4 in. long by 1 ft. 6 in. wide; state also its value at 7d. per foot super.

(ii) The contents of a cellar 12 ft. 6 in. by 8 ft. 9 in. by 7 ft. 5 in.

3. Explain the following newspaper extracts:—

(*a*) Course of Exchange

Berlin, 3 mo.	20.67.
Madrid, 3 mo.	34⅜.

(*b*) Foreign Rates of Exchange on London

	Date	Rate	
Vienna	Mar. 29	240.30	Short.

Give an account of the currencies in use at two of the above localities.

4. What weight of standard gold (fineness 916.66) could be derived from 1250 tons of ore, containing 17.9 dwt. of gold per ton?

What will be its value, assuming that one ounce of standard gold is worth 3 pounds, 17 shillings, 10½ pence?

5. Express in French units the price of steel bars at 8 pounds 5 shillings per ton.

The corresponding prices at the corresponding dates in 1900 and 1899 were 7 pounds 15 shillings and 6 pounds 15 shillings, respectively. State briefly some of the reasons for the rise in price.

6. A wholesale merchant supplies a retailer with goods to the value of 1200 pounds on June 8, 1900, also with further goods on August 20 to the value of 750 pounds. The retailer pays a sum on account of 600 pounds on June 29, and a sum of 500 pounds on August 11. Find the cash balance on December 31 (interest reckoned at 6 per cent per annum).

7. A dealer buys a whiskey (duty paid) at 13/6 per gallon. How must he dilute it, so that, by selling it at 2*d.* a quarter of a gill, he could make a net profit of 20 per cent on the cost, assuming that the expenses, etc., of the business average 60 per cent of the cost of the spirit?

COMMERCIAL GEOGRAPHY

1. From what materials are the following articles made, and from what places do we obtain these materials: china, paper, linen, soap, candles?

2. Upon what countries and to what extent is England dependent for the supply of any of the necessaries of life?

3. What are the chief seats in Great Britain of the following industries: shipbuilding, iron-smelting, brewing, boot-making, distilling?

4. What are the chief industries carried on in Middlesbrough, Nottingham, Bristol, Leeds?

5. Describe the shortest route round the world taken by a person who only touches at or travels through British territory or territory under British protection.

6. Describe the chief trade routes between the British Isles and the Continent of Europe, and the nature of the trade which is done on each route.

7. Describe the trade carried on between England and Australia.

8. Describe the position and commercial importance of Liège, Yokohama, Shanghai, Odessa, Buenos Ayres, Philadelphia.

9. What are the chief manufactures of India, and the chief seats of each manufacture?

10. What are the four chief commercial nations of the world? Arrange them in order according to the value of their foreign commerce, and mention the chief export of each. Illustrate your answer by statistics.

LONDON UNIVERSITY COLLEGE SCHOOL

COMMERCIAL DEPARTMENT

COMPLETE EXAMINATION GIVEN AT THE CLOSE OF THE SECOND SCHOLASTIC YEAR (JULY, 1902)

ECONOMIC HISTORY

Answer any Eight Questions, but not more than Eight.

1. Give an account of the Phœnician settlements and mention all the circumstances you know that contributed to the commercial success of that people.

2. Give an account of the economic basis of the ancient Athenian civilization, and give reasons for its decline.

3. What were the circumstances under which Alexandria was founded? What were the motives for its foundation, and what were the chief results?

4. Describe the chief commercial and other economic effects of the establishment of the Roman Empire.

5. What are the most important circumstances that contributed to the revival of commerce after the fall of the Roman Empire?

6. What do you know of the history of the discovery of the sea way to India? What places were chiefly affected by that discovery and in what manner?

7. What are the principal circumstances that promoted early English trade with the continent, and what were the chief features of that trade down to about the end of the fourteenth century?

8. State what you know of the early growth of English manufactures.

9. Give an account of the organization of a typical English manor of the thirteenth century, and state the effects of the institution on the productiveness of agriculture.

10. What is meant by the Black Death? State what you know of its economic effects.

11. Distinguish regulated and joint stock companies, and give a brief account of a typical example of each.

12. What is meant by the industrial revolution? Point out some of its most important effects on English industry and commerce and the distribution of the population in the United Kingdom.

COMMERCIAL GEOGRAPHY (INCLUDING COMMERCIAL PRODUCTS)

Any Eight Questions, but not more than Eight.

1. Describe the basin of the Rhone, mentioning some characteristic products. Illustrate your answer by a rough sketch map, and mark on that map three towns belonging to the basin, with the rivers or lakes on which they stand.

2. Give an account of the principal industrial region of Germany. Mention the principal circumstances that have contributed to its importance, and name and state the situation of four of the chief towns of the district that have grown up in consequence of its industrial development.

3. Where are the principal Dutch colonies, and of what importance are they to the mother country?

4. Give an account of three of the railway routes establishing communication between Italy and adjoining countries, and name the towns most directly connected by each. Mention some of the principal Italian products exported by these railways.

5. What are the principal local causes modifying the climate of Russia? Explain how the modifications are effected. Compare the climate of Russia with that of corresponding latitudes in Western Europe.

6. State what you know of the industrial and commercial development of Japan in the past thirty years. Mention any important geographical circumstances that have promoted that development.

7. Give an account of the natural advantages of Paris, Berlin, Ghent, Rotterdam, and St. Petersburg, and state how they have been improved artificially.

8. State what you know of the commercial importance of Bilbao, Nizhnii-Novgorod, Smyrna, Hankow, and Ichang.

9. What are polders, karezes, pusztas, the Karst, and the Iron Gate? Where do they occur?

10. From what countries is wheat most largely imported into the United Kingdom? Mention the chief advantages and disadvantages, both as regards production and transport, of any three regions that supply wheat to this country in large quantity.

11. Among plants yielding spices, mention three of those which have long been of most importance in oceanic commerce. State whence these three are derived and for what kind of climate they are adapted.

12. State what you know of the chief sugar-yielding plants and the condition of their cultivation for commercial purposes, giving due prominence to those which are most important of all.

13. Mention two vegetable products entering largely into commerce not due to cultivation, and give an account of the conditions under which they are obtained.

GERMAN

I. WALTHER VON DER VOGELWEIDE

Translate into English: —

1. Philipp stampfte zornig dem Boden mit dem Fusse. "Das alte Lied!" zürnte er. "Kann ich mehr thun, als bereits geschehen? Hab' ich Euch nicht all meine Leute geschickt und stehe nun selbst da ohne Hülfe und Schutz? Sind denn keine Männer mehr in der Stadt?"

"Ihr thut den Bürgern von Aachen Unrecht und uns Unrecht, edler Herr, sie thun was in ihren Kräften liegt, aber die Feinde sind zu mächtig. Wir haben kein Wasser, und die Sonne brennt heiss, und der Kampf macht müde. Täglich schwinden uns die Kräfte und unsere Tapfersten fallen einer nach dem andern."

Erzählet wie Aachen genommen wurde. (Give a short answer — about five lines — in German.)

2. Die Genossen nickten ihm zu. Wenzel freilich dachte, dass es ihm gleichgültig sein könne, ob sie heil davonkämen oder nicht. Würden sie droben überfallen, so war er ihrer los; gelang es ihnen zurückzukehren, so wär' er indessen ins Schloss geeilt, hätte die Schläfer geweckt, und da die Thore alle verschlossen, so waren die drei gefangen, und man glaubte ihnen nicht, wenn sie auch schwuren, dass Wenzel ihnen herbeigeholfen. Der hatte ja ihren Anschlag entdeckt. Und was würde in diesem Falle König Philipp sagen? Der, den er von sich gewiesen, hätte ihn gerettet.

Welchen Erfolg hatte dieser Plan? (Answer briefly in German.)

3. Wolfram sass daheim in seinem Gemach. Den Kopf in die Hand gestützt, schien er zu träumen, und nur manchmal verriet ein Zucken, das über sein Gesicht zog, dass er wachte. Noch einmal zogen *all* die Bilder seines Lebens an ihn vorüber; er sah seinen Sohn, sein Weib, und dann sich selbst, alle Länder durchziehend. Was war sein Knabe für ein Kind gewesen. Was ein Vaterherz nur wünschen und hoffen kann, das hatte er in ihm verkörpert gesehen. Und dann war er verschwunden und niemand wusste wohin.

Explain the form *all*.

Hat Wolfram seinen Sohn wiedergefunden? (Answer very briefly in German.)

II. SOLL UND HABEN

Translate into English: —

1. Auf die Erklärung Antons dass er Herrn Schröter zu sprechen wünsche, trat aus dem zweiten Comtoir ein grosser Mann mit faltigem Gesicht, mit

stehendem Hemdkragen. Anton sah schnell auf das Antlitz, und dieser erste Blick, so ängstlich, so flüchtig, gab ihm einen guten Teil seines Mutes wieder. Er erkannte Alles darin, was er in den letzten Wochen so oft ersehnt hatte, ein gütiges Herz und einen redlichen Sinn. Und doch sah der Herr streng genug aus, und seine ersten Fragen klangen kurz und entschieden. Anton fasste rasch nach seinem Brief und erzählte schnell dass sein Vater gestorben sei und dass er den Herrn von seinem Todtenbette grüssen lasse.

2. "Sie sind des Teufels, Wolfram," rief er endlich, "Sie wollen sich mit Herrn von Fink duelliren, er ist ein toller Pistolenschütz, und Sie sind Lehrling und erst seit einem halben Jahre im Geschäft; das ist unmöglich!"

"Ich bin Primaner gewesen, und habe mein Abiturientenexamen gemacht, und wäre jetzt Student, wenn ich nicht vorgezogen hätte Kauffmann zu werden! Verwünscht sei das Geschäft, wenn es mich so erniedrigt, dass ich meinen Feind nicht mehr fordern darf."

"Seien Sie nicht so heftig, ich werde zu Fink hinunter gehen, vielleicht lässt sich Alles im Guten ausgleichen."

Warum war Fink Antons Feind? (Answer briefly in German.)

3. Wie Sie alle wissen hat einer der Collegen das Geschäft verlassen. Herr Schröter hat mir deshalb heute eröffnet, das er nicht abgeneigt ist, an Stelle desselben unsern Wohlfahrt als Correspondenten in dass Provinzialgeschäft aufzunehmen. Da aber die herkömmliche Lehrzeit Wohlfahrts erst in einem, oder nach dem Uso unserer Handlung sogar erst in zwei Jahren zu Ende geht, so will er eine solche ausserordentliche Abweichung von der Ordnung nicht eintreten lassen ohne die Beistimmung des Comtoirs.

III. GRAMMAR

1. How can you classify German nouns according to their declension? To which class would you assign: Tisch, Traum, Gemach, Klinge, Antlitz?

2. Give the German for: A young rider on a white horse. He put his right hand on his shoulder. Whose sword is this? He came running.

3. Distinguish between bereit and bereits; schon and schön; unter and unten; fragen and bitten.

4. Write down 2d pers. sing. pres. indic. and imperf. subj. and past part. of erraten, fahren, schleichen, entspinnen, schliessen, anheben.

5. Frame sentences to illustrate the use of *three* prepositions with the genitive case, and also to show what prepositions are used with the following verbs and adjectives: teilnehmen, Acht geben, sich beschäftigen, sich fürchten, froh, zufrieden.

6. What are the chief uses of the subjunctive in German? Give examples.

IV. SIGHT TRANSLATION

Translate into English : —

Die Entdeckungen, welche unsere europäischen Seefahrer in fernen Meeren und auf entlegenen Küsten gemacht haben, geben uns ein so lehrreiches als unterhaltendes Schauspiel. Sie zeigen uns Völkerschaften, die auf den mannigfaltigsten Stufen der Bildung um uns herum gelagert sind, wie Kinder verschiedenen Alters um einen Erwachsenen herum stehen und durch ihr Beispiel ihm in Erinnerung bringen, was er selbst vormals gewesen und wovon er ausgegangen ist. Eine weise Hand scheint uns diese rohen Völkerstämme bis auf den Zeitpunkt aufgespart zu haben, wo wir in unserer eigenen Kultur weit genug würden fortgeschritten sein, um von dieser Entdeckung eine nützliche Anwendung auf uns selbst zu machen und den verlorenen Anfang unseres Geschlechts aus diesem Spiegel wieder herzustellen.

V. REPRODUCTION AND VIVÂ V.

FRENCH

1. ("La Canne de Jonc") : —
   Racontez en 15 ou 20 lignes : —
   soit (*a*) L'entrevue entre Napoléon et le Pape.
   soit (*b*) La terrible surprise du corps de garde russe.

2. ("Confessions d'un Ouvrier) : —
   Racontez en 15 ou 20 lignes : —
   soit (*a*) Le petit triomphe de Pierrot le bossu et les avantages qu'offre l'arithmétique aux yeux de Pierre Henri.
   soit (*b*) L'accident qui arriva à Pierre sur l'échafaudage de la rue du Cherche Midi, et expliquez ses soupçons.

3. Expliquez brièvement à un camarade qui n'a jamais étudié le langage commercial, le sens des expressions suivantes : (1) escompte, (2) facture, (3) douane, (4) entrepôt, (5) billet à ordre, (6) billet de banque, (7) lettre de crédit, (8) connaissement, (9) le change, (10) commissionaire.

4. Ecrivez sur 5 colonnes la 3e pers. plur. du Présent, de l'Indicatif, du Passé Défini, du Futur, du Plusqueparfait de l'Indicatif, et la 2e pers. plur. de l'Impératif des 5 verbes suivants : *vivre*, *acquérir*, *devoir*, *en prendre*, et (négativement) *s'y asseoir*.

5. Ecrivez une lettre d'environ 10 lignes à une maison de Paris (banque exportation &c. au choix) pour offrir vos services. Indiques brièvement ce dont vous êtes capable.

6. Dites en une quinzaine de lignes ce que vous pensez de la guerre de l'Afrique du Sud et de ses résultats.

7. Examen oral.

MATHEMATICS

1. What are the advantages of the coördinate and radial systems of measurement?

2. Find the area contained by the three lines $ax + by = c$, $a_1 x + b_1 y = c_1$, $a_2 x + b_2 y = c_2$.

What is the area of a triangle whose three vertices are the points (0, 1), $(\frac{1}{2}, \frac{1}{2})$, (2, 0)?

3. Find the equation to the tangent to the circle $x^2 + y^2 = r^2$, at the point $r \sin \theta$, $r \cos \theta$.

4. Differentiate from first principles x^3, $\sin x$. If $y = \int (x)$ and $x = \phi (z)$, show how to find $\frac{dy}{dz}$.

5. Trace the curves $y^3 = x$, $y^2 = a^2 + x^2$.

6. Discuss the question of the convexity or concavity of a given curve at a given point.

7. Find the minimum value of $x^2 + y^2$, if $y + x = 1$.

8. Expand $\sin x$ & $\log (1 + x)$ by means of Maclaurin's series.

9. Integrate $\int \sin x \, dx$, $\int \frac{dx}{x-a} \frac{}{x-b}$, $\int \frac{x^m \, dx}{(a+bx)^n}$, m being a positive integer.

10. Find the area of the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$.

11. Discuss the question of finding the length of curves. Find the length of the curve $y^2 = ax$ between the points (0, 0) and (a, a).

12. Show how the calculus may be used to solve interest questions. Give a simple example.

ENGLISH

1. Show that the will of King Lear yields to passion, not suddenly, but by successive stages.

2. Quote passages which show different traits in the characters of Goneril and Regan.

3. Give instances from the play to illustrate peculiarities of Shakespearian grammar.

4. Comment on the following phrases: "tied to the stake," "important," "impertinency," "netherstocks," "marry!"

5. Explain the following: "We are drunkards and liars by an enforced obedience of planetary influence;" "a glass-gazing superserviceable finical

slave ; " " an embossed carbuncle ; " " the five wits ; " " so distribution should undo excess and each man have enough."

6. Write out *either* the ten lines beginning : —

" How fearful
And dizzy 'tis to cast one's eyes so low," etc.,

or the ten lines beginning : —

"Fairest Cordelia, that are most rich being poor," etc.

7. Comment on the following passages : —

(*a*) A mixture of a lie doth ever add pleasure.

(*b*) To speak in a mean, the virtue of prosperity, etc. Complete the passage.

(*c*) The vices of authority are chiefly four.

(*d*) Nobility of birth doth commonly abate industry.

(*e*) We take cunning for a sinister or crooked wisdom.

(*f*) The Turks, a cruel people, are nevertheless kind to beasts.

8. What objects does Bacon recommend to the observation of travelers ?

9. Write a précis of the Essay on Envy *or* the Essay on Counsel.

10. What are, according to Bacon, the three fruits of friendship ? Give some account of the last as treated by Bacon.

11. What does Bacon point out as the causes and remedies of seditions ?

12. In what senses are the following employed by Bacon ? Shrewd ; a futile person ; affecting of the weal of men ; openness in opinion ; indifferent persons.

POLITICAL ECONOMY

Candidates to attempt at least Two Questions in Each Section of the Paper ; but not more than Eight Questions in all.

A

1. Distinguish value in use, value in exchange, price. Can the value in use of an article to a given person be (*a*) smaller, (*b*) greater, than its value in exchange to him (1) when he wishes to buy it, (2) when he wishes to sell it ?

2. "Capital is wealth set aside for future production."

"Capital is wealth set aside for the satisfaction of future needs."

Which of these definitions do you prefer, and why? Which corresponds more closely to the commercial use of the word "capital"?

Discuss under each definition the capital of (*a*) a doctor, (*b*) a railway company.

3. What are the chief functions of money?

In what ways are gold and silver specially fitted to perform these functions? In what ways do they fail, and what substitutes have been employed or suggested?

B

4. What are the advantages of division of labor?

Trace the steps in the division of labor (in the general organization of the industry, not technical details) from the small single-handed shoemaker through various grades, up to the large boot and shoe factory.

In what ways does the supply of boots and shoes improve or deteriorate as the division of labor progresses, and the scale of the business grows larger?

5. The economists of the middle of the nineteenth century held that a continued increase in the population of England would necessarily mean increased poverty.

State the grounds of this prediction, and account for its falsification.

6. Which do you consider would be the better off (physically, economically, and socially), the employees of a factory of five hundred male hands situated in a large town, or those of a similar factory which had been moved (employees and all) into open agricultural country? Give reasons for your answer.

C

7. What is meant by a foreign drain? How may it be checked (*a*) by natural means, (*b*) by artificial devices?

8. What are the chief functions of the Bank of England? How are they separated, and from what period does the separation date?

9. What economic effects would you expect to follow (*a*) in Cape Colony, (*b*) in London, from the resumption of the export of gold from the Transvaal?

10. Describe briefly the course of a commercial crisis.

Suggest remedies that might be tried at various stages to mitigate its severity, and some general business principles which might help to prevent its recurrence.

COMMERCIAL KNOWLEDGE AND COMMERCIAL ARITHMETIC

Candidates to attempt at least Two Questions in Each Section of the Paper. Not more than Eight Questions in all should be attempted.

A

1. Explain the following contracted phrases and state how each is used: c.f.i., E. & O.E., F.O.B., F.P.A., per pro.

2. J. Smith has supplied T. Brown with goods to the value of £100. Compare the advantages to J. Smith of the receipt from T. Brown of—

(*a*) A check for £100.

(*b*) A promissory note for £100 at three months.

(*c*) A bank note for £100.

(*d*) A letter acknowledging the debt, and promising to pay in three weeks.

Write a copy of each of these four documents more or less in facsimile form. What are the bookkeeping entries appropriate to each?

3. What are the following: stock, shares, debentures, preference stock, deferred stock?

4. A shipper having obtained a "mate's receipt" for certain goods delivered on board a steamer for a foreign port, what steps must be taken before a bill for the value of those goods can be discounted and the proceeds credited to the shipper's bank account?

5. What is a contract? How does it differ from an agreement? How are contracts usually classified? What are the characteristics of each kind?

A offers to sells B a horse for £50, and agrees that the offer shall remain open for 48 hours. B posts an acceptance of the offer the same day, which reaches A the following morning. In the meantime, however, A has sold the horse to C. Discuss the rights and liabilities of A and B.

B

6. The following is the trial balance of Messrs. Gerrard & Co. as at December 31, 1900: —

1900.			
Dec. 31.	Cash	£670 9 6	£645 10 0
	Bank	1663 5 0	320 15 0
	Goods	1100 5 0	806 15 0
	Bills Receivable	323 0 0	248 0 0
	L. Marsden	95 0 0	95 0 0
	M. Payton	222 0 0	182 0 0
	Clifton & Co.	327 10 0	361 10 0
	Bills Payable	100 0 0	335 0 0
	Capital		1657 10 0
	A. Brandon	221 0 0	125 0 0
	Discount	1 8 0	2 10 0
	Bad Debts	5 12 6	
	Business Expenses	50 0 0	
		£4779 10 0	£4779 10 0

Value of goods unsold £396.

From the above figures, make out a goods account, profit and loss account, and balance sheet.

7. Name, describe, and state the uses of the books and registers which *must* be kept at the registered office of a company limited by shares. Are there any additional books or registers which it is desirable to keep?

8. What is understood by the terms "Dr." and "Cr."? On what principles are entries placed on the Dr. and Cr. sides respectively of an account? Illustrate your answer by explaining a Dr. and a Cr. entry in (*a*) a ledger account, (*b*) the cash book.

C

9. Find the change in income from selling £7000 stock: —

(*a*) Baltimore 4½ per cent Gold Bonds at 108¼, and buying Chicago 5 per cent Bonds at 111. Brokerage ⅛ per cent.

(*b*) Lambeth Waterworks 7½ per cent at 192–196, and buying Debenture Corporations 4½ per cent at 105–109. Brokerage ¼ per cent.

10. Construct a table for the conversion of the following prices per ton into francs per kilogramme at the following rates of exchange: —

Prices per ton, 5*s.*, 10*s.*, £1, £2, £3, £4, £5, £10, £20.
Rates of exchange, 24.50, 24.75, 25.00, 25.25, and 25.50.
(1 ton = 1016.05 kilogrammes.)

Use the table thus constructed to convert £43 17*s.* 6*d.* per ton to francs per kilogramme at 25·25.

11. Make out an account sales of 36 hogsheads of sugar consigned to you for sale by Frazer & Co., Demerara, per S.S. *Albion*, and sold as follows: 6 hhds. 98¾ cwt., at 20*s.*; 12 hhds. 183 cwt., at 20*s.* 6*d.*; 10 hhds. 147½ cwt., at 21*s.*; 8 hhds. 113¼ cwt., at 21*s.* 4*d.* Charges paid: freight 44 tons, at 19*s.* 6*d.*; landing wharfage, etc., at 9*d.* per hhd. Credit yourself with 5 per cent on payments and charge 2½ per cent on sales. Show net proceeds.

12. A. & Co., London, have to pay 7865 marks in Frankfort. What will be the cost of a three months' bill, with exchange at 20.53 and discount 3 per cent? (Brokerage 1 per mille; bill stamp ½ p. m.)

CHEMISTRY

Five Questions only to be attempted. Equations and Diagrams to be given when possible.

1. What would you observe if hydrogen chloride gas were passed into aqueous solutions of (*a*) sodium carbonate, (*b*) lead nitrate, (*c*) sodium sulphite, (*d*) bismuth nitrate?

2. Write the chemical names and formulæ of (1) zinc blende, (2) hematite, (3) fluorspar, (4) galena, (5) tinstone, (6) realgar, (7) pyrites, (8) pyrolusite, (9) calcspar, (10) magnesite.

3. How would you prepare crystals of (*a*) lead nitrate from litharge, (*b*) copper sulphate from copper?

4. How would you distinguish between a bromide and an iodide, between a sulphite and a sulphate, and between an arsenate and a phosphate?

5. Describe briefly the process by which alcohol is obtained from starch, and how it may be converted into acetic acid.

6. Describe the preparation of aluminium and mention its chief physical properties.

NEW YORK REGENTS' EXAMINATION (1902)

COMMERCIAL GEOGRAPHY

Ten Questions to be answered.

1. Describe some industry of New York State with which you are personally familiar, including the disposition of the product and the means of transportation by which it reaches consumers.

2. Mention *five* important products of New York State, agricultural, mineral, and manufactured. In what line of industries does this state take the lead?

3. Give, with location, the *six* leading seaport cities of the United States in the order of their importance.

4. Give name and location of a city in the United States noted for (*a*) steel manufacture, (*b*) beef-packing, (*c*) electric supplies, (*d*) shoe manufacture, (*e*) silk mills.

5. Give the location of *each* of the following ports: Duluth, Cleveland, Oswego, Detroit, Buffalo, Chicago, Bay City, Marquette, Milwaukee, Houghton. Mention an important commodity handled at each port.

6. Show how geographic conditions have affected the commercial importance of Great Britain.

7. What textile is (*a*) most largely exported from Great Britain, (*b*) most largely imported into Great Britain? Mention *two* industries other than the manufacture of textiles that are carried on extensively in the United Kingdom.

8. Mention an important commercial city of (*a*) France, (*b*) Germany, (*c*) China, (*d*) Brazil, (*e*) Australia. Give a leading export of each city mentioned.

9. Mention *five* states of the United States, *four* countries of Europe, and *one* country of Asia which are extensive producers of wheat.

10. Describe the recent development of manufacturing industries in the South, with special reference to cotton and iron.

11. Mention, in order of importance, *five* countries that carry on an interchange of commodities with the United States. Give in each case (*a*) the leading export, (*b*) the leading import.

12. Show how temperature and rainfall affect the commercial development of a country.

13. Mention *three* articles of export from the Philippines. Which is in greatest demand? How does the import trade of the islands compare with the export trade? Mention an important seaport of these islands, and state its superior advantages.

14. Describe the production of sugar, using the following outline: leading varieties, chief producing countries, chief consuming countries, by-product.

15. Write about 150 words on the commercial importance of the proposed Isthmian Canal. What countries besides the United States would be benefited by such a canal?

COMMERCIAL LAW

Ten Questions to be answered.

1. Answer subdivisions *a*, *b*, *c*, *d*, and *e*, referring to the following instrument: —

$1375.25 ALBANY, N.Y., May 27, 1902.

Three months after date, for value received, I promise to pay LESLIE P. TOMPKINS_____ or order, Thirteen Hundred Seventy-five $\frac{25}{100}$_____ Dollars, at Morton National Bank, with interest at 6 per cent per annum.

WILLIAM L. HAMILTON.

(*a*) What is the name of this instrument?

(*b*) To what general class and to what specific class does it belong?

(*c*) Does it contain any unnecessary words, and, if so, what are they?

(*d*) Assume that you have taken this paper in due course for value; on what day, where, and by whom should payment be demanded?

(*e*) If payment is not made when so demanded, what should be done, and why?

2. What constitutes usury, and what penalty does it incur in New York? May more than the statutory rate of interest be taken in this state, and, if so, under what conditions?

3–4. A owes B $500, and gives him, July 3, a certified check on the Adamant Bank. B pays the check to C, who allows it to be indorsed "without recourse." C surrenders a note against B due the same day, which note

had been received from D regularly indorsed. C deposits the check, 11.30 same day, in Traders' Bank, where he has a regular account. (All the transactions occur in the same city, which has no clearing-house.) The check was sent out for collection on the next business day, when it was found that the Adamant Bank had not opened its doors after closing on the afternoon of July 3, and had become insolvent. Who bears the loss? Write an opinion.

5. E stops F on the highway, and says, "I will give you $125 for that horse you are driving." F says, "All right; I will sell him to you," and drives on. Is there a contract? Why?

6. Mention in detail the *five* obligations assumed by the indorser of negotiable paper. Can an indorser relieve himself of any of these obligations, and, if so, how?

7. G is indebted to H, who expresses to J his fears that G will not pay. J replies, "Don't worry; I will see that you are paid." Is J bound? Why?

8. K, aged 20, borrows money from L, and buys with it a suit of clothes of which he is in need, a field-glass, and a gun. Can an action be at any time maintained by L? Explain.

9. What is meant by the terms "guaranty" and "suretyship"? In what respect does the liability of a guarantor differ from that of a surety?

10. A Michigan mill owner, visiting a Buffalo lumber dealer, bargains to sell the dealer a million feet of lumber, then contained in five specified piles. Afterward it is found that the lumber had burned with the mill on the night before the bargain was made. Is there a contract? Discuss all the questions involved.

11. M sells goods to N, who pays for them. Afterward N expresses dissatisfaction with the goods, and M agrees to warrant them against certain defects. Is M bound by his warranty? State the principle.

12. As head clerk and bookkeeper for Bingham & Bates, draw up in proper form a power of attorney, authorizing you to sign checks and indorse commercial paper in behalf of the firm. Show execution of the instrument. Show also the form in which you would indorse.

13. What is a bill of lading? To what extent is a bill of lading a negotiable instrument? Give an illustration showing the convenience of its negotiable quality.

14. A man dies intestate, leaving a wife and two daughters, also two children of a son deceased. The estate consists of realty $12,000 and personal property $21,381. Describe the process of distribution, and state the share due to each person.

15. State broadly the purpose of the national bankruptcy law and the scope of its operation.

PEIRCE SCHOOL

EXAMINATION FOR GRADUATION

COMMERCIAL LAW AND BUSINESS FORMS

(Required for graduation: 70 credits on this paper; work must be neat and English good.)

1. What is commercial law? Common law? Statute law? In what courts are cases arising under commerce or trade tried?

2. Mention the two leading ideas involved in a contract. Distinguish between executory and executed contracts. State one practical result of this distinction.

3. State the leading principles of law that in a sale of personal property apply (1) to the seller, (2) to the buyer.

4. Draw the following promissory notes: —

(1) Non-negotiable; maker, John Brown; payee, Walter Jones; amount, $1000.20; time, four months; place of payment, Bank of North America.

(2) Negotiable — above data.

(3) State how each may be transferred.

5. What is bailment? State the titles, general relations, and respective obligations of the parties to a bailment.

6. When does the title pass to the purchaser (1) under a contract of sale, (2) when goods are manufactured on order? Mention two of the grounds on which a contract of sale may be avoided.

7. What is partnership? Corporation? State how each is formed and dissolved.

8. A in Boston offers by mail a quantity of shoes at a certain price to B in New York. B mails a letter from New York to A in Boston, declining the offer. Three hours later, B in New York telegraphs A in Boston as follows: "Offer accepted. Ship at once." This telegram is received by A two hours in advance of B's letter of declination. Is there a contract? Explain fully.

9. A of Philadelphia sells to B of New York goods to the amount of $1000. You buy from B goods, $1000; D of Philadelphia buys from C goods, $1000; C of Pittsburg buys from you goods, $1000. Draw at ten days' sight so as to cancel the entire indebtedness between the parties. Accepted to-day.

BUSINESS CUSTOMS

(Required for graduation: 70 credits on this paper; work must be neat and English good.)

1. As the manager of a general retail store, state in detail what steps you would take on the arrival of a miscellaneous stock of goods, to get them ready for sale.

2. What precautions should be observed in taking from a stranger a check or a bank draft in payment for goods sold him for immediate removal? Explain.

3. State the advantages and disadvantages of taking a note in payment of a debt.

4. John Johnson wishes to open a bank account and asks your advice. Write him a letter, telling him just how to proceed. Make out a deposit ticket containing a record of specie, bank notes, and express orders, two checks, and a draft for collection (charges ¼).

5. November 20, 1900. Received from John Knox invoice of following goods, dated November 16: —

300 yards	Ingrain	Carpet	at	$ .60
150 "	Wilton	"	"	2.25
200 "	Brussels	"	"	1.10
125 "	Oilcloth	"	"	.30

Terms, 10 per cent off 5 days, net 60 days. Make out the invoice in due form.

6. Sent John Knox, New York draft in payment. Make out check on Peirce School Bank for draft. Draw the draft and indorse in proper form.

7. Explain the utility of banks to a business community. Why are bank notes not real money? What banks issue notes, and on what security?

8. Describe fully the plan and purpose of a letter of credit. Of what advantage outside the money consideration? What is superseding the letter of credit? Name a few of the leading American banking houses which issue such letters.

9. What do you understand by "bank clearings"? Explain the process and advantage.

10. What is a mercantile agency? Give the origin, object, and the method of obtaining information.

PRINCIPLES OF THE INTERNATIONAL ASSOCIATION FOR THE PROMOTION OF COMMERCIAL EDUCATION [1]

I. AIM AND OBJECTS

The promotion of a complete system of commercial education in all commercial and industrial countries concerned, by means of: —

[1] Approved in Zurich on the 13th of July, 1901.

(*a*) The discussion of questions of common interest.

(*b*) The publication of an official periodical, and of a yearbook, written in several languages, giving statistics and information regarding the development of commercial education in different countries.

(*c*) The establishment of a commercial education bureau for the furnishing of information on matters relating to commercial education.

The funds of the association will, as far as possible, be devoted to the following objects : —

(*d*) The granting of certificates as to the competency of teachers of modern languages desirous of teaching their mother tongue in a foreign land.

(*e*) The publication of a yearly record of the literature bearing upon commercial education, etc.

(*f*) The provision of prizes for competitive essays upon important questions on scholastic organization and on methods of teaching commercial subjects.

(*g*) The appointment of international committees to consider questions relating to commercial education.

(*h*) The establishment of vacation courses in foreign countries.

(*i*) The providing of information respecting educational tours.

(*j*) The establishment of regular relations between institutions of different countries and the establishment of a central office for the exchange of school reports.

(*k*) The establishment of traveling scholarships.

II. MEMBERSHIP

The membership of this association is open to educational bodies, institutions, clubs, and individuals.

Applications for membership must be submitted to the executive committee, who, if necessary, will confer with the members of the committee in the country in which the applicant lives.

* * * * * * * * * *

VI. MEETINGS

International meetings will be held every three years, the program of each day's discussion being drawn up by the executive committee.

The national committee of the country in which the international meeting takes place will have charge of the necessary arrangements.

APPENDIX II

SELECT BIBLIOGRAPHY

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